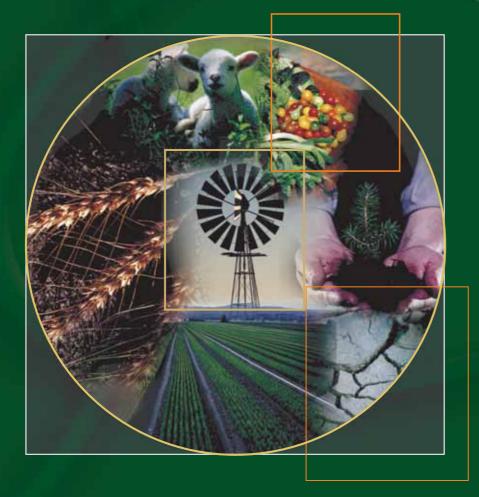
StructuredTrainingProgrammes







Department: Agriculture REPUBLIC OF SOUTH AFRICA

Structured Training Programmes

Information Pack 2005/2006

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Compiled by Directorate: Education and Training

Obtainable from

Directorate: Agricultural Information Services Private Bag X144 Pretoria 0001

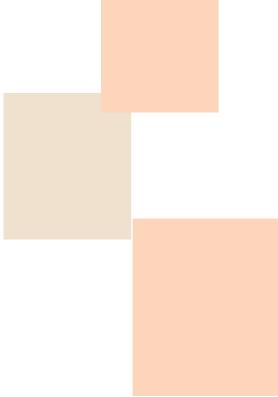
ISBN 1-86871-163-3

For further information contact: Directorate: Education and Training Private Bag X250 Pretoria 0001

Tel (012) 319-6739/319-7028 Fax (012) 319-6972/7271

Contents

Foreword	V
Section 1	1
Introduction	1
Overview of the programmes recorded	1
Section 2	1
Accredited qualifications	1
Learnerships	2
Skills programmes	3
Section 3	3
Comprehensive skills programmes and agricultural insti <mark>tutions</mark>	3
Agricultural Research Council	3
Cedara College of Agriculture	6
Elsenburg College of Agriculture	14
Fort Cox College of Agriculture and Forestry	28
Glen College of Agriculture	31
Grootfontein Agricultural Development Institute	37
Lowveld College of Agriculture	40
Madzivhandila College of Agriculture	41
Owen Sitole College of Agriculture	46
Potchefstroom College of Agriculture	48
Tompi College of Agriculture	50
Tsolo College of Agriculture	52



Foreword

The purpose of this document is to provide available training programmes offered by various public institutions, which are registered with SAQA, and accredited by Sector Education and Training Authorities (SETAs). The document itself seeks to respond to the concerns that have been raised by various stakeholders who have been calling for available training programmes to support skills development in the sector.

It covers diversified training needs from role-players such as emerging farmers, commercial and small scale farmers and for the benefit of different members of community (youth, women and people with disabilities), farmworkers, and other role-players in the sector. The document provides information on available qualifications, learnerships and skills programmes. When it comes to skills programmes the document provides information on the name of the course, institution presenting the course, contents of the course, duration, cost of each course being offered and contact details of each institution. Admission to any training programmes can be discussed with service providers directly.

The Directorate Education and Training, in support of the Comprehensive Agriculture Support Programme (CASP), acknowledges that to establish a strong agricultural sector there is a need for well-structured training programmes, which are relevant and responsive to the needs of stakeholders. It is critically important to provide capacity building as a support package, to ensure that clients are able to manage their farming enterprises in a sustainable manner, through skills development.

It is in this context that the DoA presents the comprehensive collection of agriculture-related training programmes to support capacity building in the sector by presenting available structured skills programmes within the reach of our clients.

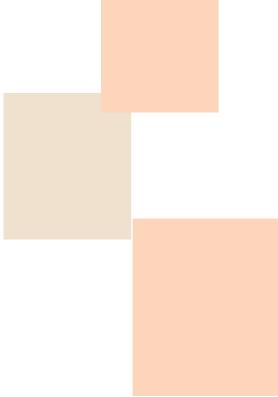
These structured training programmes with the exception of the listed qualifications and learnerships are available from accredited agricultural training institutions including the Agricultural Research Council and colleges of agriculture. It is also important to note that not all skills programmes are registered on a unit standard base, however, it is worth noting that all the institutions that have not aligned their training programmes have started the process of alignment.

Finally it is acknowledged that some more work still needs to be done in terms of capturing those training programmes relevant to the needs of the sector which currently are still being developed. This document will be revised on an annual basis. Presently the Directorate Education and Training in partnership with the Primary Agriculture Education and Training Authority (PAETA) is developing training manuals for qualifications in farming and agri-business. Central to the process are the colleges of agriculture through the Association of Principals of Agricultural Colleges (APAC). The level of the qualifications is ranging from the NQF level 1 to NQF level 5. In total there are 12 certificates in farming and agri-business already developed by the PAETA in consultation with all the agricultural education stakeholders in the sector. It is envisaged that from 2007 onwards various service providers will seek accreditation from PAETA to offer those qualifications, as they are more comprehensive compared to the currently available training programmes. In terms of the Service Level Agreement between the DoA and PAETA, the training manuals will focus on best practices in faming and will be available to the beneficiaries of agrarian reform on a cost recovery basis.

Stakeholders and members of the public in general should note that the aim of the document is only to make information available to the public and it is not intended to promote any particular organisation, including courses offered by these particular organisations. Service providers not listed are invited to submit their information to the Directorate Education and Training at any particular moment in time.

I sincerely hope you will find the information contained in this document useful.

DIRECTOR GENERAL: DEPARTMENT OF AGRICULTURE



Section 1

Introduction

This document has been compiled as the result of a request from different stakeholders on available and accredited training programmes that are mainly designed to address the needs of the emerging sector.

The Directorate Education and Training has been inundated with requests from members of the public on available and accredited training programmes. The major interest has been on training programmes that have been designed to support the needs of the emerging sector.

A desktop study coupled with telephone discussions with the managers of various institutions responsible for training was conducted. Information collected was verified with the record of qualifications database in the South African Qualifications Authority (SAQA). Information collected is grouped into three main categories namely: qualifications, learnerships and skills programmes.

Overview of the programmes recorded

The data is broken down into three main categories, namely qualifications, learnerships and skills programmes registered with SAQA and accredited by the three Agricultural Aligned SETAs. It should be noted, however, that it is only the Primary Agriculture Education and Training Authority (PAETA), which is having a list of accredited qualifications. The other two SETAs namely Sector Education and Training Authority for Secondary Agriculture (SETASA) and Food and Beverages (FoodBev) have only managed to develop and register learnerships.

All the registered qualifications and learnerships are not offered by any of the public institutions except structured skills programmes. In addition the development of qualifications and learnerships is at the unit standard level, i.e. no course content has been developed to date and there are no training manuals available.

The skills programmes (short courses) offered by the public institutions are not in compliance with the unit standards and NQF, however, an agreement was reached with SAQA that institutions will be given time to align their programmes.

Section 2

Accredited qualifications, learnerships and skills programmes

Qualifications

TABLE 1 Comprehensive list of accredited qualifications is provided in

SETA	Qualifications	NQF level
PAETA	National Certificate: Animal Production	1
	National Certificate: Mixed Farming Systems	1
	National Certificate: Plant Production	1
	National Certificate: Animal Production	2
	National Certificate: Mixed Farming Systems	2
	National Certificate: Plant Production	2
	National Certificate: Animal Production	3
	National Certificate: Plant Production	3
	National Certificate: Plant Production	4
	National Certificate: Animal Production	4
	National Diploma: Animal Production	5
	National Diploma: Plant Production	5

Learnerships

TABLE 2 Comprehensive list of accredited learnerships

SETA	Learnership	NQF leve
PAETA	Farmworker: Agronomy	1
	Farmworker: Animal Husbandry	1
	Farmworker: Horticulture	1
	Farmworker: Agronomy	1
	Farm Owner: Animal Husbandry	1
	Farm Owner: Animal Horticulture	1
	Farm Owner: Farming	2
	Junior Farm Manager	4
	Senior Farm Manager	5
ETASA	Learnership: Agricultural Machinery Technician	2
	Learnership in Grain Handling Processes	2
	Sugar Industry Technical Maintance Worker	2
	National Certificate in Sugar Technology Processing: Sugar Refining	2
	National Certificate in Sugar Technology Processing: Juice Preparation	2
	National Certificate in Sugar Technology Processing: Crystallisation	2
	National Certificate in Sugar Technology Processing: Laboratory Practice	2
	National Certificate in Sugar Technology Processing: Extraction	2
	National Certificate in Sugar Technology Processing: Cleaning of Grain	2
	National Certificate in Sugar Technology Processing: Cleaning of Grain	2
	National Certificate in Sugar Technology Processing: Prepare Wheat for Milling	2
	National Certificate in Tobacco Production	3
	National Certificate in Cigarette Filter Rod Production	3
	National Certificate in Metalised Paper Production	3
	Seed Research and Development Operations: Apply Basic Business Principles	3
	Seed Research and Development Operate in a Team	3
	National Certificate: Seed Processing and Packaging: Operate in a Team	3
	National Certificate: Seed Analysis: Test the Vigour of Seed	3
	National Certificate: Sample Seed	3
	National Certificate: Dry Pet food Processing (Food Safety/Ingredient Storage)	3
	National Certificate: Dry Pet Food Processing (Automotated Filling)	3
		3
	National Certificate Dry Pet Food Processing (Automotated Batch Coating	3
	National Certificate: Fruit Packaging and Grading Process Level 3	3
	Learnership in Agri Sales and Services	4
	National Certificate: in Tobacco Services	4
	National Certificate: in Cigarette Production Technology	4
	National Certificate: in Cigarette Production Technology	4
	Further Education and Training Certificate: Seed Production	4
	Further Education and Training Certificate: Seed Production: Dry Seed	4
	Further Education and Training Certificate: Seed Production: Store Seed	4
	Further Education and Training Certificate: Seed Marketing: Execute Seed Trials	4
	Further Education and Training Certificate: Seed Research and Development: Certify a Seed Unit	4
	FETC: Seed Research and Development: Conduct a Field Inspection of a Seed Unit	4
	Further Education and Training Certificate: Seed Processing and Packaging Control:	4
	Further Education and Training Certificate: Seed Processing and Packaging Control	4
	Learnership <mark>in Grain Handling Management</mark>	5
	Learnership in Specialist Agricultural Machinery Technician	5
	Certificate in Practical Management	5
	National Cer <mark>tificate in Sugar Technology</mark>	5

TABLE 2 (Continued)

SETA	Learnership			NQF level
FOOD BEV	/ National Certificate: Food and Beverages Processing: Soft Drinks Processing			3
	National Certificate: Food and Beverages Manufacturing Technology: S	Spray Dried Food P	roducts	3
	National certificate: Food and Beverages Processing: Soft Drinks			3
	National Certificate: Food and Beverages Packaging			3
	National Certificate: Food and Beverages Processing Oil Milling Proces	sing		3
	National Certificate: Food Beverages Processing: Dairy Primary Proces	sing		3
	National Certificate: Flour Confectionery Baking			3
	National Certificate: Food and Beverages Processing Wine			3
	National Certificate: Food and Beverages Processing: Brewering Proce	ssing		3
	National Certificate: Food and Beverages Processing: Fish and Sea Fo	bc		3
	National Certificate: Food and Beverages Processing: Oil and Fat-base	d Products Process	sing	3
	National Certificate: Food Laboratory Processes: Dairy Laboratory Ana	lyst		3
	National Certificate: Food and Beverages Processing: Malting Processi	ng		3
	National Certificate: Food Beverages Processing: Spirits Processing			3
	National Certificate: Food Beverages Processing: Meat Processing			4

Skills programmes

A comprehensive list of various public institutions offering skills programmes is provided in the list below.

- Agricultural Research Council
- Cedara College of Agriculture
- Elsenburg College of Agriculture
- Fort Cox College of Agriculture
- Glen College of Agriculture
- Grootfontein Agricultural Development Institute
- Lowveld College of Agriculture
- Madzivhandila College of Agriculture
- Owen Sitole College of Agriculture
- Potchefstroom College of Agriculture
- Tompi Seleka College of Agriculture
- Tsolo College of Agriculture

Section 3

Comprehensive skills programmes and agricultural institutions

Agricultural Research Council

After completion of the courses mentioned below, the participants will either be awarded a certificate of competency or a certificate of attendance.

Wheat production

OBJECTIVE	The course deals with the basic methods of wheat production
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Soil acidity, understanding soil analysis, fertilisation of wheat, identification of insects, pests and diseases, guidelines for cultivar choice

DURATION	3 days		
FINANCIAL IMPLICATIONS	R245 per participant for tuition, R750 per participant for accommodation, R105 per participant for meals		
Crop production			
OBJECTIVE	The course deals with the basic methods of crop production on a large and small scale		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Soil preparation, use of fertilisation, identification of disease and pest control		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R1 130 per participant for tuition, R500 per participant for accommodation, R70 per participant for meals		
Maize and dry bean prod	luction		
OBJECTIVE	The course deals with new methods of production practices, nutrition and fertilisation of crops		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Soil preparation, hygiene, use of fertilisation		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R416 per participant for tuition, R500 per participant for accommodation, R70 per participant for meals		
Technical and production	ı		
OBJECTIVE	The course deals with the skills needed to bring economic growth and enables farming communities to excel. The technical, managerial and social skills necessary for effective extension work have been taken into account		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Crop production management, cropping systems, how to plant a trial, alternative production strategies		
DURATION	3 days		
FINANCIAL IMPLICATIONS	R185 per participant for tuition, R750 per participant for accommodation, R105 per participant for meals		
Yoghurt making/"maas" and "maaskaas"			
OBJECTIVE	The course deals with the basic methods of yoghurt, "maas" and "maaskaas" production		
CONTENT	To offer participants the practical learning experience, the course covers the		

CONTENT To offer participants the practical learning experience, the course covers the following learning areas: Microbiology, general hygiene, starter cultures, sensory evaluation of dairy products

DURATION 2 days

FINANCIAL IMPLICATIONS R900 per participant for tuition, R500 per participant for accommodation

Cheese making	
OBJECTIVE	The course deals with the basic methods of cheese making
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Milk composition, microbiology, hygiene, starter- cultures

DURATION	4 days
FINANCIAL IMPLICATIONS	R1 400 participant for tuition, R1 000 p <mark>er participant for ac</mark> commodation
Goat management	
OBJECTIVE	The course deals with the basic management of goats in a farming business
CONTENT	To offer participants the practical learnin <mark>g experience, the c</mark> ourse covers the following learning areas: Nutrition, heal <mark>th management, housing</mark>
DURATION	5 days
FINANCIAL IMPLICATIONS	R1 500 per participant for tuition, R1 250 per participant for accommodation, R175 per participant for meals
Beef cattle management	
OBJECTIVE	The course deals with the re <mark>production and principles</mark> of feeding beef cattle
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Beef cattle breeds in SA, the feedlot system, marketing, record keeping, breeding objectives and factors influencing it, selection of herd sires for beef production, selecting cattle for functional efficiency, health management, supplementary feeding, introduction to beef cattle improvement schemes, demonstrations of dosing, dehorning and castration, management of veld grazing, introduction to LIDCAT and genetic services
DURATION	3 days
FINANCIAL IMPLICATIONS	R1 200 per participant for tuition, R750 per participant for accommodation, R105 per participant for meals
Poultry production	
OBJECTIVE	The course deals with the basic principles of the poultry production cycle, i.e. from the ordering of chickens until they start producing eggs
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Introduction to poultry industry, farming systems, poultry housing, basic equipment, care and rearing of chicks, care of pullets, care of laying hens, litter and manure handling and fly control, practical on poultry breeding, record keeping, egg quality, nutrition, identifying diseases, postmortems, immunisation
DURATION	3 days
FINANCIAL IMPLICATIONS	R1 200 per participant for tuition, R1 000 per participant for accommodation, R140 per participant for meals
Sheep management	
OBJECTIVE	The course deals with the basic principles of sheep management
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: All areas of sheep management
DURATION	4 days
FINANCIAL IMPLICATIONS	R1 200 per participant for tuition, R1 000 per participant for accommodation, R140 per participant for meals

Pig production

OBJECTIVE	The course deals with the pig production cycle, i.e. from weaning until they are ready to be sold
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Basic genetic principles, breeds and breeding pro- grammes, nutrition, pig housing, economic principles, management in the farrowing house, management from weaning to marketing, record keeping, reproduction of pigs, practical reproduction management, selection of pigs, pork classification systems, pork as a product, shower and veterinary aspects
DURATION	3 days
FINANCIAL IMPLICATIONS	R1 200 per participant for tuition, R750 per participant for accommodation, R105 per participant for meals

Dairy cattle management

OBJECTIVE The course deals with basic methods of milk production

CONTENT To offer participants the practical learning experience, the course covers the following learning areas: Dairy cattle breeds, health management, basic housing principles and planning a dairy unit, functional effectiveness of a dairy cow, management of dairy replacement cows, feeding of lactating cows, genetic principles and selection, profitable milk production, marketing, reproduction management, introduction of dairy courses, milking machines and cleaning, record keeping, short note on silage, basic implements, introduction of milk recording, introduction to LIDCAT

DURATION 3 days

FINANCIAL IMPLICATIONS R1 200 per participant for tuition, R750 per participant for accommodation, R105 per participant for meals

Sheep producti	on	
OBJECTIVE		The course deals with the basic methods of sheep production, i.e. from weaning until they are ready to be sold
CONTENT		To offer participants the practical learning experience, the course covers the following learning areas: General health management, breed and stock selection, housing and handling facilities, rams and ewes before mating, mating, lambing time, lambs, weaning, dry ewes
DURATION		4 days
FINANCIAL IMPL	ICATIONS	R1 200 per participant for tuition, R1 000 per participant for accommodation, R105 per participant for meals
ARC—Animal Nut	rition and <i>l</i>	Animal Products Institute
Private Bag X2 IRENE 0062		
Tel (012) 672-91	53	

Tel (012) 672-9153 Fax (012) 665-1563

Cedara College of Agriculture

After completion of the courses mentioned below, the participants will either be awarded a certificate of competency or a certificate of attendance

NB: Trainees are advised to arrange their own accommodation and meals

Vegetable production	
OBJECTIVE	The course deals with basic planning and management of vegetables
CONTENT	To offer participants the practical learnin <mark>g experience, the c</mark> ourse covers the following learning areas: Cultural practices, cultivars, irrigation, pest, disease and weed control measures, economics of production, marketing
DURATION	3 days
FINANCIAL IMPLICATIONS	R300 per participant for tuition only
Effective public speaking	9
OBJECTIVE	The course deals with the techniques of public speakin <mark>g in the workplace</mark>
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Criteria of effective spoken communication, the difference between prepared and impromptu presentation, importance of impromptu presentation, importance of evaluation (how to deliver and implement it), how to add impact to the spoken presentation, why use visual aids? Criteria of effective visual aids, design, preparation and use of visual aids, overcoming barriers to effective communication, how to overcome nervousness, addressing the concerns of participants in respect of public speaking
DURATION	5 days
FINANCIAL IMPLICATIONS	R225 per participant for tuition only
Crop production	
OBJECTIVE	The course deals with the practical factors in crop production and appropri- ate technology for small-scale farmers
CONTENT	To offer participants the practical learning experience, the following three kinds of crops will be discussed in detail: Maize, potatoes, dry beans
DURATION	4 days
FINANCIAL IMPLICATIONS	R420 per participant for tuition only
Beef production	
OBJECTIVE	The course deals with the practical factors of beef production
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Risk management in beef production, e.g. drought, herd composition, fodder bank, collapsing of the beef herd, e.g. reducing conception rate and weaning mass, alternative weaning season, what is BLUP?, economics in beef production, future of the beef industry, what feed-lots want from beef farmers, applied low-cost beef production, condition scoring practical
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuition only
Pig production	
OBJECTIVE	The course deals with the practical factors of pig production
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Introduction to the pig industry, i.e. local and global, pig breeds, management of the sow, management and selection of the boar, service management, management and selection of replacements, dis-

	ease control of economically important diseases, management of piglets, nutrition, marketing, record keeping and use		
DURATION	1 day		
FINANCIAL IMPLICATIONS	R210 per participant for tuition only		
Soil fertility			
OBJECTIVE	The course deals with the practical principles of soil fertility and plant nutri tion that affect decision making with respect to fertilisation and liming		
CONTENT	To offerparticipants the practical learning experience, the course covers the following learning areas: When does liming pay? Why should we test our soil? Why is nitrogen difficult to manage? How does phosphorus fixation affect my fertilisation programme? When should we use organic fertilisers? How do I interpret soil test results? How do I work out which fertilisers to buy?		
DURATION	3 days		
FINANCIAL IMPLICATIONS	R270 per participant for tuition only		
Rural radio broadcasters	s course		
OBJECTIVE	The course aims to help rural broadcasters in identifying and recording ma- terial and interviews for broadcast on both community radio stations and the SABC. The trained broadcasters will be expected to work in close proximity to the community radio stations that could best meet the needs of the farm- ing community		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Networking in the community and how to select items for recording, how to write a script and edit it, importance of knowing your recorder, script reading, what makes a good interview, how to conduct interviews, documentation and storage, how to get the most out of your field recorder, using sound effects to best advantage, how to overcome nervous-ness		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R225 per participant for tuition only		
The bioresource program	nme: land assessment support system		
OBJECTIVE	The course deals with the diversity of natural resources of KZN		
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: The interpretation of BRU inventories for optimising land-use of the province, limitation of the programme: as well as value of this information for planning, familiarisation with the relevant computer programs for accessing data and mapping facilities, market price and cost, practical exercises to apply resource information		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R200 per participant for tuition only		
Training poster module			
OBJECTIVE	The course deals with the development of extension training modules.		
CONTENT	To offer participants the practical learning experience, the course covers the		

CONTENT To offer participants the practical learning experience, the course covers the following learning areas: The elements of an Extension Training Module, compiling scientifically correct, factual extension information for the develop-

	ment of a module, condensing the information to limited facts for a student work book, condensing the limited facts to least text facts for a poster mod- ule, visualising the information in clear graphic form, be it stick figure car- toons, magazine pigs, photos or verbal descriptions, for the benefit of illiter- ate or neoliterate students, basics of poster design, the editing and proofing process, the translation process, reproduction process, field testing and implementation, monitoring and evaluation	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R120 per participant for tuition only	
Marketing		
OBJECTIVE	The course deals with the basic principles and approaches of marketing.	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Introduction to marketing, marketing mix, market prices and costs, market strategies, commodity marketing, marketing and government—functional and organisational issues	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R370 per participant for tuition only	
Farm record keeping		
OBJECTIVE	The course deals with the theoretical and practical knowledge required for keeping of records needed for farm business management. This includes a brief introduction to an elementary record book for farmers and to the FIN-REC computerised record-keeping system	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Farm information, balance sheets, income and expenditure statements, cash flow summaries, bank reconciliation statements	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R350 per participant for tuition only	
Dairy production		
OBJECTIVE	The course deals with feeding and management principles of dairy cattle.	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Feeding and dairy cow, dairy heifer rearing, dairy herd record keeping, reproduction management, milking machines and cow byre routine	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R30 per participant for tuition only	
Soil classification and land capacity		
OBJECTIVE	The course deals with the identification of common soil, ecotope and poten- tial assessment and land capacity classification	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Soil classification, the properties of soil, agricultural potential of soil, including ecotope identification, land capacity classification	
DURATION	3 days	

FINANCIAL IMPLICATIONS R290 per participant for tuition only

Yoghurt making

i ognært marting		
OBJECTIVE	The course deals with the manufacturing of yoghurt	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Maas, butte milk, feta cheese, cottage cheese on a small scale	
DURATION	3 days	
FINANCIAL IMPLICATIO	ONS R120 per participant for tuition only	
Cultivated pastures		
OBJECTIVE	The course deals with the basics of cultivated pastures, including practical and theoretical aspects	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas:	
	Theoretical What are grasses and legumes and how do they grow? Annual and perenni- al species, selecting pasture species for KwaZulu-Natal, seed quality and seed testing, establishing pastures—soil sampling, seedbed preparation, sowing/ planting, irrigation, utilising pastures—grazing, hay/silage, foggage, fertilisa- tion, problems on pastures	
	<i>Practical</i> Weeds in pastures, implements, soil sampling, land preparation, fertilising, planting, hay/silage/foggage, electric fencing	
DURATION	2 days	
FINANCIAL IMPLICATIO	ONS R180 per participant for tuition only	
Hay and silage making	ng	
OBJECTIVE	The course deals with the introduction to hay and silage making	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Suitable species and cultivars, daily field husbandry, fertilisation, appropriate herbicides and their application, economic consider- ations, principles of hay/silage making, frequently encountered problems	
DURATION	Course presented on request	
FINANCIAL IMPLICATIO	ONS R170 per participant for tuition	
Beekeeping		
OBJECTIVE	The course deals with the basic introduction to beekeeping, with hives being examined and equipment demonstrated.	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: The functioning of a hive, commercial and developing farmer beekeeping, apiary sites and protection, the equipment required, the management of bees, the honey flow, harvesting the crop, marketing honey and honey products, pollination services, bee diseases and problems	
DURATION	2 days	
FINANCIAL IMPLICATIC	DNS R210 per participant for tuition	

Farm business management

rann business managen		
OBJECTIVE	The course deals with the theoretical and practical methods needed to man- age a farm business. There will be a demonstration of how such information and techniques involved, are analysed	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Determine whether the farm is making a profit or a loss	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R370 per participant for tuition only	
Equine nutrition		
OBJECTIVE	The course deals with the basics of equine nutrition with the focus on get- ting the most from home-grown feeds. A visit to the local stud farm, that makes good use of pastures and home-grown feeds, is included in the course	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Excluding stud feeds, the cost of which is a bit like asking how long a piece of string is, many myths and truths about the fertilisation and management of pastures and suitability of home-grown feeds, such as maize silage for horses	
DURATION	2 days	
FINANCIAL IMPLICATIONS	R300 per participant for tuition only	
Map reading		
OBJECTIVE	The course deals with the basic methods of map reading	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Map reading, practical exercise relating to each lecture	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R270 per participant for tuition only	
Soya-bean processing		
OBJECTIVE	The course deals with the basic processing methods of soya-beans	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Basic home processing, uses of soya for human consumption, dry soya-bean cooking methods and homemade soya-milk	
DURATION	1 day	
FINANCIAL IMPLICATIONS	R90 per participant for tuition only	
Small-stock production		
OBJECTIVE	The course deals with the basic principles of sheep and goat farming and covers both theory and practical	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Sheep and goat production in KwaZulu-Natal, general nutrition of sheep, veterinary aspects of sheep and goats, sheep and goat management calendars, management of lambing and kidding, wool and meat production, facilities, sheep and goat farming problems, economics of sheep and goat production, practical session	

DURATION	3 days
FINANCIAL IMPLICATIONS	R300 per participant for tuition only

Farming systems approach

The course deals with the basic farming systems approach	
To offer participants the practical learning experience, the course covers the following learning areas: Rationale and challenges, concepts, definition and overview of FSA steps, steps involved in FSA to transfer and development of technology, diagnostic stage, problem analysis and selection of interventions planning and implementation of research intervention, statistical analysis economic evaluation, farmer evaluation, technology dissemination, monitor ing, evaluation and impact assessment, evolving participatory methods and techniques involving farmer field schools, participatory extension approach es, participatory rural appraisals and participatory impact monitoring	
3 days	
R150 per participant for tuition only	

Entrepreneurial course

OBJECTIVE The course deals with the basic farming systems approach

CONTENT To offer participants the practical learning experience, the course covers the following learning areas: The business idea, market research and raising finance, planning and developing a business plan, building entrepreneurial skills, marketing and sales, customer relations and managing staff, negotiating and managing finance, keeping financial records and basic bookkeeping

DURATION 5 days

FINANCIAL IMPLICATIONS R350 per participant for tuition only

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	yc	i Li	UII

OBJECTIVE	The course deals with the basic introduction into irrigation planning, inclueing examination of soil, crops, the effect of climate on irrigation systems ar irrigation planning. The course is based on sprinkler irrigation
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: View of different systems, water measurement, sy tem energy maintenance, economics and scheduling
DURATION	4 days

FINANCIAL IMPLICATIONS R350 per participant for tuition only

Small-scale dairying

OBJECTIVE The course deals with the nutritional and management of factors affecting the running of a small dairy herd, including zero-grazing to grazing systems

CONTENT To offer participants practical learning experience, the course covers the following learning areas: Cross-breeding, basic nutrition, supplementary feeding, calf rearing, milking and milk handling

DURATION 1 day

FINANCIAL IMPLICATIONS R80 per participant for tuition only

Barley and wheat		
OBJECTIVE	The course deals with crop production aimed at extension, general input suppliers (chemicals, seeds and fertilisers) and farmers in general. All aspects relating to production of these crops by both small-scale and commercial farms, will be dealt with	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Soil conservation, nutrition of the crop, efficient use of manure and fertiliser, animal/tractor drawn implements and other equipment, crop establishment practices, crop rotation, wheat control, harvesting and planning, budgeting, financing, marketing value adding options	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R240 per participant for tuition only	
Agricultural extension		
OBJECTIVE	The course deals with the practical aspects of agricultural extension services	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Concepts and practices of agricultural extension, his- tory and philosophy of agricultural extension, components of extension serv- ices, delivery systems, the process of communication and change, the diffu- sion and adoption of innovations, development and management of an extension programme for the community	
DURATION	5 days	
FINANCIAL IMPLICATIONS	R450 per participant for tuition only	
Game management		
OBJECTIVE	The course deals with the basic principles of game management	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Vegetarian management, game species selection, fencing, water distribution, roads and other infrastructural requirements	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R300 per participant for tuition only	
Veld management		
OBJECTIVE	The course deals with the ecological study of the veld and interaction on veg- etation, grazers, browsers and veld condition assessment	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: common soils and their characteristics	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R360 per participant for tuition only	
Alien plant control		
OBJECTIVE	The course deals with alien weeds suitable for working of water contracts	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Field practical training involving weed identification, method of control, safety, rehabilitation practices, examination	
DURATION	5 days	
FINANCIAL IMPLICATIONS	R950 per participant for tuition only	

Research methodology

OBJECTIVE The course deals with the basic research methods CONTENT To offer participants practical learning experience, the course covers the following learning areas: Basic concepts of experimental design, data management, planning and establishing of a trial, variables and their levels (choice of site and field layout), site selection in farmer participatory trials, confidence and significance (key concepts of inferential), field plot plans, practicalities of laying out plots and preparing trials, basic guidelines for planting soya-bean, dry bean and maize experiments, irrigation and application of agro-chemicals, field notebook and record keeping, harvesting (subsampling and yield determination), statistical analysis, data manipulation and interpretation, informative presentation of tables, graphs and statistics, report writing

DURATION 2 days

FINANCIAL IMPLICATIONS R140 per participant for tuition only

The principal, Mr S Nompozolo Private Bag X6008, HILTON PIETERMARITZBURG 3200 Tel (033) 355-9304 Fax (033) 355-9303

Elsenburg College of Agriculture

After completion of the courses mentioned below, the participants will either be awarded a certificate of competency or a certificate of attendance

Introduction to poultry production

OBJECTIVE	The course deals with theoretical knowledge needed to make informed decisions in the planning of intended poultry production unit
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Overview of the South African and international poultry industry, market research and marketing requirements, characteristics and needs of poultry, biological features of poultry, suitable environment for poultry, production cycles, production systems, housing facilities, effective management and economic considerations
DURATION	1 day

FINANCIAL IMPLICATIONS R70 per participant for tuition and R140 for accommodation and meals

Introduction to pig production

OBJECTIVEThe course deals with the theoretical knowledge to be considered to make
informed decisions in the planning of pig production unitCONTENTTo offer participants the practical learning experience, the course covers the
following learning areas: Overview of the South African and international
pork industry, market research and marketing requirements, characteristics
and needs of pigs, biological features of pigs, suitable environment for pigs,
production cycles, production systems, housing facilities, effective manage-
ment and economic considerationsDURATION1 day

FINANCIAL IMPLICATIONS R70 per participant for tuition and R140 for accommodation and meals

Poultry production		
OBJECTIVE	The course deals with the theoretical knowledge and skills with regard to the production practices of poultry	
CONTENT	To offer participants the practical learning experience, the following three kinds of crops will be discussed in detail: Poultry breeds, production cycles, care of poultry during growth stages, housing and infrastructure, nutrition, health management, record keeping and marketing	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 for accommodation and meals	
Poultry production		
OBJECTIVE	The course deals with the the oretical knowledge and skills with regard to the production practices of poultry	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Poultry breeds, production cycles, care of poultry during growth stages, housing and infrastructure, nutrition, health management, record keeping and marketing	
DURATION	10 days	
FINANCIAL IMPLICATIONS	R700 per participant for tuition and R1400 for accommodation and meals	
Beef production		
OBJECTIVE	The course deals with the theoretical knowledge and practical skills regard- ing beef cattle farming	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Beef production in the Western Cape, breed types, selection, breeding seasons, animal management, marketing, nutrition, animal health and record keeping	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 for accommodation and meals	
Pig production		
OBJECTIVE	The course deals with the theoretical knowledge and skills with regard to the production practices of a pig unit	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Pig breeds, breeding and selection, care of pigs during growth stages, housing, nutrition, health management, record keeping and marketing and value adding	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 for accommodation and meals	
Dairy production		
OBJECTIVE	The course deals with the theoretical knowledge and skills regarding dairy production practices	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Dairy breeds, anatomy and morphology, factors influencing milk production, reproduction and calving, calf rearing, nutrition,	

	milk machines, milking procedure and hygiene, economics of dairy produc- tion	
DURATION	10 days	
FINANCIAL IMPLICATION	S R700 per participant for tuition and R1 400 for accommodation and meals	
Farming awareness		
OBJECTIVE	The course deals with the knowledge related to the challenges in the farm- ing environment and to make purposeful decisions regarding choices between the different enterprises	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Choose a crop/livestock to farm with, choose a sys- tem for operating your farming venture, choose the right practices, choose the right technology, managing your farm and agriculture as a science	
DURATION	3 days	
FINANCIAL IMPLICATION	R210 per participant for tuition and R420 for accommodation and meals	
Agricultural marketing		
OBJECTIVE	The course deals with the knowledge and skills in respect of the principles of marketing and marketing practices required to make agricultural products successful	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Introduction to marketing, principles of marketing, the concept market, demand and supply of goods and services, market equilib- rium, market research, marketing mix, marketing channels and chain and marketing plan and strategy	
DURATION	3 days	
FINANCIAL IMPLICATION	S R210 per participant for tuition and R420 for accommodation and meals	
Financial management		
OBJECTIVE	The course deals with the knowledge and understanding of the aspects and procedures of financial management in the agricultural environment	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Introduction to financial management, financial man- agement concepts (income, expenditure, profit), need for capital within an agri-business, sources of income for agri-business, requirement for a record- ing system, basic record keeping (petty cash and cash books), financial state-	
	ments (cash flow statement, income statement and balance sheet), budget- ing (cash flow budget, enterprise budget and whole farm budgeting)	
DURATION	4 days	
FINANCIAL IMPLICATION	S R280 per participant for tuition and R560 for accommodation and meals	
Agricultural manageme	ent	
OBJECTIVE	The course deals with the knowledge and understanding of the principles of agricultural management as well as the necessary skills of managing a farm business successfully	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Introduction to management, components of the agri- cultural production environment, factors of production, (land, labour capital, and management), agricultural production systems, managerial tasks (plan-	

and management), agricultural production systems, managerial tasks (plan-

	ning, organising, decision making, and control), different levels of manage- ment (top, middle and lower management), different management styles (democratic, autocratic, laissez-faire, etc) and administrative systems (com- munication and information systems	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R4 <mark>20 for accommodatio</mark> n and meals	
Entrepreneurship		
OBJECTIVE	The course deals with knowledge and understanding of fundamental aspects and procedures of a new business	
CONTENT	To offer farmers practical learning experience, the course covers the follow- ing learning areas: The concept entrepreneurship, the importance of entre- preneurship in South Africa, characteristics of a successful entrepreneur, business ethics and social responsibility, different type of business, selection of a good farm business idea, farming operation plan (FOP), importance of a business plan, components of a business plan (production plan, marketing plan, financial plan, etc), risk identification and management in farming	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 for accommodation and meals	
Soil preparation and plan	nt nutrition	
OBJECTIVE	The course deals with the theoretical and practical knowledge and skills regarding soil preparation and plant nutrition, to make well considered and informed observations and limited decisions	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Soil properties (physical, chemical, organic), plant nutrition (necessary nutrients, fertilisers, sampling, compost, soil analysis) and cultivation practices	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 for accommodation and meals	
Parts and functioning of	vegetable plants	
OBJECTIVE	The course deals with the theoretical and practical knowledge and skills regarding parts and functioning of vegetable plants tree to make well-considered and informed observations and limited decisions	
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Subsurface parts (root system), above ground parts (stem, scaffold, branches, shoots, leaves, buds, flower and internal structure of the plant)	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 for accommodation and meals	
Manipulation and irrigation of vegetables		
OBJECTIVE	The course deals with the theoretical and practical knowledge and skills regarding manipulation and irrigation of vegetables to make well-considered and informed observations and limit decisions	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Training systems, thinning methods, flower manipulation, fruit manipulation, irrigation systems and water application	

DURATION 4 days

FINANCIAL IMPLICATIONS R280 per participant for tuition and R560 for accommodation and meals

Crop protection of vegetables

OBJECTIVE	The course deals with the theoretical and practical knowledge and skills regarding crop protection of vegetables to make well-considered and informed observations and limit decisions
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Plant diseases, pests, diseases associated with veg- etables, insects, pests associated with vegetables, weeds and integrated pest control
DUDATION	

DURATION 4 days

FINANCIAL IMPLICATIONS R 280 per participant for tuition and R560 for accommodation and meals

Harvesting and post-harvest handling of vegetables

OBJECTIVE	The course deals with the theoretical and practical knowledge and skills regarding harvesting and post-harvest handling of vegetables to make well-considered and informed observations and limit decisions
CONTENT	To offer participants practical learning experience, the course covers the fol- lowing learning areas: Fruit development, maturity determination, sampling, harvesting process, harvesting methods and post-harvest handling
DURATION	4 days
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 for accommodation and meals

Safe handling of chemicals

OBJECTIVE		The course deals with the theoretical and practical methods of safe handling and use of chemicals to ensure the safe and responsible use thereof
CONTENT		To offer participants practical learning experience, the course covers the fol- owing learning areas: Introduction, storage and packaging, classification codes, guidelines for user protection, application safety and protection of environment
DURATION		1 day
FINANCIAL IMPL	ICATIONS	R70 per participant for tuition and R140 for accommodation and meals

Calibration of knapsack sprayer

OBJECTIVEThe course deals with the basic knowledge and skills regarding the principles
related to the calibration of knapsack sprayers to ensure optimal sprayingCONTENTTo offer participants practical learning experience, the course covers the fol-
lowing learning areas: Components of spraying equipment (types of nozzles,
droplet size, pump, pressure control system, filtering and agitating the tank),
calibrating the pump, application volume, speed, perform basic calculations,
use the metric system accurately, able to select hand tools (basic equipment
appropriate to calibration of sprayers, operate, care for and operate basic
tools (equipment in safe and responsible manner, apply routine maintenance
and routine servicing plan procedures to ensure ongoing efficient working
order of equipmentDURATION3 days

FINANCIAL IMPLICATIONS R210 per participant for tuition and R420 for accommodation and meals

Calibration of spraying equipment

OBJECTIVE	The course deals with the basic knowled related to the calibration of spraying equ	0 0	0 1 1
CONTENT	To offer participants practical learning e lowing learning areas: Components of s droplet size, pump, pressure control syst calibrating the pump, application volum use the metric system accurately, able t appropriate to calibration of sprayers), tools (equipment) in safe and responsible and routine servicing plan procedures order of equipment	praying equipment (tem, filtering and agi e, speed, perform ba o select hand tools (operate, care for ar e manner, apply rout	types of nozzles, itating the tank), asic calculations, basic equipment nd operate basic ine maintenance
DURATION	4 days		

FINANCIAL IMPLICATIONS R280 per participant for tuition and R560 for accommodation and meals

Operating a personal computer

OBJECTIVE The course deals with the knowledge and skills in computer hardware and software to prepare them for learning more specific application programs

CONTENT To offer participants practical learning experience, the course covers the following learning areas: Understanding, use and maintenance of hardware components, basic operating system procedures, understanding different types of application software and the aim of each and computer managing files on the

DURATION 4 days

FINANCIAL IMPLICATIONS R280 per participant for tuition and R560 for accommodation and meals

Introduction to vineyard crop protection

and meals

OBJECTIVE	To provide participants with the basic knowledge of the principles of disease, pest and weed control (crop protection) of a vineyard
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Principles of disease and pest control, symptoms of fungi, bacteria and virus diseases, control of diseases and pests in vines, understand and control abnormalities/damages caused by environmental conditions
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation

Vineyard crop protection

OBJECTIVE	To provide participants with the basic knowledge and skills of the principles of disease and pest control and crop protection of a vineyard.
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: General characteristics, principles and control of plant diseases, namely fungi, bacteria and viruses, as well as insects and weeds
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals

Installation of trellis systems in vineyards

OBJECTIVE	To provide participants with the knowledge and skills regarding the advan- tages, disadvantages and practices of trellising, as well as the installation of
CONTENT	trellis systems To offer participants the practical learning experience, the course offers the following learning areas: Advantages of trellising namely practices, sunlight and micro-climate. Disadvantages of trellising, namely diseases and produc- tion practices. Choices of trellis systems, namely vigour, row width, wind and
DURATION	frost. Installation of trellising systems 2 days
FINANCIAL IMPLICATIONS	R140 per participant for tuition and R280 per participant for accommodation and meals

Framework development of vines

OBJECTIVE	To provide participants with the knowledge and skills regarding handling
	young vines from nursery to plant, the reasons for vine frame development
	as well as skills to do greenshoot development and development during 2nd,
	3rd and 4th growth

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Handling from nursery to plant, reasons for vine frame development, namely vigour and quality, balanced framework, leaf distribution and micro-climate, greenshoot development method, development during second, third and fourth growing season, winter pruning of different vine frames and winter cane development

DURATION 3 days

FINANCIAL IMPLICATIONS R210 per participant for tuition and R420 per trainee for accommodation and meals

Canopy	manag	ement	of vines

OBJECTIVE	To provide participants with the knowledge and skills regarding canopy man- agement as well as spring and summer practices
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Principles of canopy management, namely nutrition sinks, efficient leaf surface, light and air penetration, influence on pruning and harvesting costs and control of crop loads. Application of canopy management practices, namely light management, suckering, tipping and topping, tucking in of shoots, removal of unwanted leaves, crop control and removal of new growth, spring and summer practices

DURATION 3 days

FINANCIAL IMPLICATIONS R210 per participant for tuition and R420 per participant for accommodation and meals

Maintenance pruning of vines

OBJECTIVETo provide participants with knowledge and skills regarding the parts and
functioning of the
plant, as well as the knowledge and skills to prune vines
correctlyCONTENTTo offer participants the practical learning experience, the course offers the
following learning
areas: Principles of vineyard pruning, namely reasons for
pruning, principles and application of pruning, time of pruning and pruning
systems. Application of pruning principles, namely making the correct cut

DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals	
Harvesting grapes		
OBJECTIVE	To provide participants with the necessary knowledge and skills to determine the optimum ripeness of grapes for a specific purpose, as well as skills to har- vest products according to standard procedures.	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Ripening and determination of ripeness of grapes, namely the development of the berries, criteria to determine ripeness, evaluation of quality and maturity indexing. Harvesting of the product, namely planning of a harvesting programme, sampling, preparations before harvest and harvesting systems. Post-harvest handling of the product, namely biological factors involved in decay, cooling of fresh produce and post-harvest technology	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals	
Viticulture nursery practi	ces	
OBJECTIVE	To provide participants with the necessary knowledge and skills in plant prop- agation, as well as an understanding of good nursery practices	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: The propagation environment, preparing propagation material and propagation media, propagation procedures, propagation structures, different types of propagation media and environment and establishing a process for the post-propagation activities	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals	
Introduction to vine culti	vation	
OBJECTIVE	To equip participants with knowledge of the basic needs of vines and to give them an overview and insight of production practices and procedures in an environment where vines are cultivated	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Natural resources required for vine cultivation, infra-structure and stock requirements for vine cultivation, production cycle/ procedure for vine cultivation and harvesting and post-harvest practices procedures for vine cultivation	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals	
Basic soil science and vine nutrition		
OBJECTIVE	To provide participants with knowledge and skills regarding basic soil science and vine nutrition	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Demonstration and understanding of the properties	

of soil, nutrient requirements of vines, nutritional deficiencies, fertilisation methods of growing vines, soil sample taking, soil preparation and the making and usage of compost

DURATION 3 days

FINANCIAL IMPLICATIONS R210 per participant for tuition and R420 per participant for accommodation and meals

Soil science and vine nutrition

OBJECTIVETo provide participants with the necessary knowledge and skills regarding soil
science and vine nutritionCONTENTTo offer farmers the practical learning experience, the course offers the fol-
lowing learning areas: Properties of soil and how these impact on plant nutri-
tion and soil preparation, soil preparation and remediation, nutritional pro-
grammes based on recommendations, implementation of soil utilisation plan
for vines and identification and interpretation of symptoms of nutritional defi-
ciencies and making of recommendations

URATION 4 days

FINANCIAL IMPLICATIONS R280 per participant for tuition and R560 per participant for accommodation and meals

Establishment of vineyards

OBJECTIVE To provide participants with the necessary knowledge, skills and understanding regarding the most important aspects to be considered during the establishment of a vineyard

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Vine structure, selection of site, namely influence of climate and soil on production and correct selection of location and terrain. Choice of scion and rootstock, namely correct selection of location and terrain, most important scion and rootstock cultivars, improvement of plant material. Establishment of a block, namely spacing for wine, table and raisin grapes, layout of a block and treatment before and during planting.

DURATION 3 days

FINANCIAL IMPLICATIONS R210 per participant for tuition and R420 per participant for accommodation and meals

Parts and functioning of the vine

OBJECTIVETo provide participants with the necessary knowledge and understanding
regarding the most basic parts and the functioning of vinesCONTENTTo offer participants the practical learning experience, the course offers the
following learning areas: Names and functions of the different parts of the
plant, including the roots, leaves, flower and fruit, descriptions of the life
cycle of plants, basic concepts of water/chemical intake and food production
by the plant parts, relationships that exist between the entire plant and the
environmentDURATION2 days

FINANCIAL IMPLICATIONS R140 per participant for tuition and R280 per participant for accommodation and meals

Structure and functioning of the vine

OBJECTIVE To provide participants with the necessary knowledge and understanding regarding the structures and functioning of vines

CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Different parts of a plant, plant relationship to environment, structure and basic functioning of a plant cell, translocation of water and nutrients, anatomy and physiology of a leaf, processes and transpiration, respiration and photosynthesis, maturity and ripening of fruit, gaseous exchange, osmosis, translocation and cell division	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R42 <mark>0 per participant for accommodation and meals</mark>	
Introduction to irrigation	n	
OBJECTIVE	To provide participants with the necessary knowledge and skills regarding irrigation, soil-water relationships, water requirements of crops and different methods of irrigation	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Soil-water relationships, movement of water in soil availability of water, soil texture, soil structure, water requirements of crops, methods of irrigation, irrigation scheduling to crop requirements, irrigation system installation	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals	
Irrigation		
OBJECTIVE	To provide participants with the necessary knowledge and skills regarding irrigation, soil-water relationships, water requirements of agricultural crops, different methods of irrigation as well as a basic understanding of irrigation scheduling	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Soil-water relationships, movement of water in soil, availability of water, soil texture, soil structure, sampling and observation of water quality, water requirements of crops, methods of irrigation, irrigation system installation, basic maintenance of systems, flow and pressure regulation, cleaning filters, pipeline maintenance, cleaning of blocked sprinklers, shifting of pipes, caring and maintenance of equipment and tools used for irrigation	
DURATION	3 days	
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals	
Plant vines		
OBJECTIVE	To provide participants with the necessary knowledge and skills to plant and the successful establishment of vineyards	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Selection, use and care of the appropriate tools and equipment used in the planting of vines, monitoring and handling of planting materials for successful establishment according to required procedures and understanding the impact of environmental conditions on the successful establishment	
DURATION	2 days	
FINANCIAL IMPLICATIONS	R140 per participant for tuition and R280 per participant for accommodation and meals	

Block manager—long-term crops

- OBJECTIVE To provide participants with the necessary knowledge and skills regarding aspects of management of long-term crops and to give them an overview of the cultivation practices applied on a farm where long-term crops are cultivated
- CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Evaluate, adjust production processes to manage natural resources sustainability, compare and evaluate infrastructural factors affecting requirements, required stock, historical and current framework structures of the industry, governments and departments that affect the specific industry, legislation pertaining to the specific industry, supportive resources, associations, groups, networks and services available to assist members of the industry, checking, receiving and storing of a range of agricultural inputs, updating of records, ordering of stock and processing of payments, scheduling the re-ordering of agricultural inputs, inspection and organising of maintenance equipment facilities and infrastructure
- DURATION 2 x 4 days (therefore 8 days in total)

FINANCIAL IMPLICATIONS R560 per participant for tuition and R1 120 per participant for accommodation and meals

Crop protection of deciduous fruit

OBJECTIVE	To supply participants with theoretical and practical knowledge and skills
	regarding crop protection of pome and stone fruit, to make well-considered
	and informed observations and limited decisions

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Plant diseases, diseases associated with deciduous fruit, insects, pests associated with deciduous fruit, weeds and integrated pest control

DURATION	4 days
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FINANCIAL IMPLICATIONS R280 per participant for tuition and R560 per participant for accommodation and meals

Soil preparation and plant nutrition

To provide participants with theoretical and practical knowledge and skills
regarding soil preparation and plant nutrition, to make well-considered and
informed observations and limited decisions

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Soil properties, namely physical soil properties, chemical soil properties and organic soil properties. Plant nutrition, namely necessary nutrients, fertilisers, sampling, compost, soil and soil analysis. cultivation practices

DURATION 4 days

FINANCIAL IMPLICATIONS R280 per participant for tuition and R560 per participant for accommodation and meals

Harvesting and post-harvesting handling of deciduous fruit

- OBJECTIVE To provide participants with theoretical and practical knowledge and skills regarding harvesting and post-harvest handling of deciduous fruit to make well-considered and informed observations and limited decisions
- CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Fruit development, maturity determination, sam-

	pling, harvesting processes, harvesting methods and post-harvesting hand-	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R56 <mark>0 per participant for</mark> accommodation and meals	
Pruning and manipulation	on of deciduous fruit	
OBJECTIVE	To supply participants with theoretical and practical knowledge and skills regarding pruning and manipulation of deciduous fruit to make well-considered and informed observations and limited decisions	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Training systems, pruning methods, flower manipulation	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 per participant for accommodation and meals	
Parts and functioning of	the deciduous fruit tree	
OBJECTIVE	To supply participants with theoretical and practical knowledge and skills regarding parts and workings of the deciduous fruit tree to make well-con- sidered and informed observations and limited decisions	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Subsurface parts, namely the root system. Above-ground parts, namely stem, scaffold, branches. Shoots, leaves and buds. Internal structure of the tree	
DURATION	4 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 per participant for accommodation and meals	
Erecting and maintenand	ce of wire fencing	
OBJECTIVE	To provide participants with the theoretical knowledge and basic skills with regard to the principles of erecting and maintaining wire fences.	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Boundary or ordinary fences—important prerequisites, type of fences, fencing material, types of anchors and anchor constructing, planting of a pole, fence heights, the unrolling of wires, the stretching of boundary fences, joining and tying of wires, spacing of line poles and droppers, stretch lengths, hanging of gates and safety measures	
DURATION	5 days	
FINANCIAL IMPLICATIONS	R350 per participant for tuition and R700 per participant for accommodation and meals	
Metal work on the farm		
OBJECTIVE	To supply participants with the theoretical knowledge and basic skills with regard to the principles of shielded metal arc and oxyacetylene welding	
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Workshop practices, preparation and securing of workpieces for welding, shielded metal arc welding, namely safety measures and legislation, preparation and assembling of welding equipment, fundamental principles of arc welding, welding techniques and welding defects.	

Gas w	elding	(oxyacetylene),	namely	safety	measures,	preparation	and
assem	bling of	welding equipme	ent, weld	ing of s	heet metal,	brazing and r	nan-
ual cut	ting of	mild steel					

DURATION 10 days

FINANCIAL IMPLICATIONS R700 per participant for tuition and R1 400 per participant for accommodation and meals

Routine tractor care on the farm

OBJECTIVE	To supply the participants with the theoretical knowledge and basic skills with
	regard to the principles of routine care of tractors

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Basic principles of the working of the internal combustion engine, electrical system, air intake system, fuel system, lubrication system, cooling system, clutch, front wheel bearings, brakes, steering mechanism, tyres and tyre pressure, three point system, safety and safety on farm storage of fuel

DURATION 2 days

FINANCIAL IMPLICATIONS R140 per participant for tuition and R280 per participant for accommodation and meals

Communication

OBJECTIVE		To provide participants with the necessary knowledge and skills in respect of communication in order to ensure that they can communicate effectively		
CONTENT		To offer participants the practical learning experience, the course offers the following learning areas: The objective and medium of communication, the different ways of communication and effective ways of having a conversation		
DURATION		3 days		
FINANCIAL IMPLI	CATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals		
HIV/Aids				
OBJECTIVE		To provide participants with the necessary knowledge and skills in respect of HIV/Aids, the effect that it has on the society, and how to improve the situation		
CONTENT		To offer participants the practical learning experience, the course offers the following learning areas: The effect of HIV/Aids on the immune system, knowing how HIV/Aids is transmitted, knowing how to prevent HIV/Aids, attitudes towards HIV/Aids in the workplace and society, the impact of HIV/Aids in the workplace, planning, preparing and offering of an information session on HIV/Aids in the workplace		
DURATION		3 days		
FINANCIAL IMPLICATIONS		R210 per participant for tuition and R420 per participant for accommodation and meals		
Conflict manage	eme <mark>nt</mark>			
OBJECTIVE		To provide participants with the necessary knowledge and skills to handle conflict effectively in any given situation		
		To offer participants the practical learning experience, the course offers the following learning areas: Identification of different conflict situations, Identi-		

	fication of conflict situations in the workplace, the difference between feel- ings and actual problems and how to handle conflict
DURATION	2 days
FINANCIAL IMPLICATIONS	R140 per participant for tuition and R28 <mark>0 per participant for</mark> accommodation and meals
Leadership	
OBJECTIVE	To provide participants with the necessary knowledge and skills to lead a team effectively
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Different role players in a group/group dynamics, the role/function of the leader in a group, characteristics and skills of an effective leader, conflict management in a group, encouraging participation in decision making, the importance of delegating tasks and the development of a plan of action to enhance team performance
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals
Life orientation	
OBJECTIVE	To provide participants with the necessary knowledge, life skills and self-con- fidence to play a significant role in society
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Knowledge of oneself, namely self-image, self-management, goal setting, thinking skills, time management, listening skills, problem-solving, decision making, studying skills, assertiveness and career planning and management skills. A healthy lifestyle
DURATION	4 days
FINANCIAL IMPLICATIONS	R280 per participant for tuition and R560 per participant for accommodation and meals
Motivation	
OBJECTIVE	To provide participants with the necessary knowledge and understanding in respect of the importance of motivation and skills needed to motivate himself/herself and a team to greater achievements
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: The importance and role of motivation, motivation theories, motivation techniques, participation in decision making, leadership and motivation as well as the importance of feedback and recognising achievements
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition and R420 per participant for accommodation and meals
Meeting procedures	
OBJECTIVE	To provide participants with the necessary knowledge, understanding and skills in respect of planning, organising and conducting meetings
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Planning a meeting, the purpose and objective of

	the agenda of meetings, the purpose and objective of minutes of meetings, taking of minutes at meetings, how to handle conflict in a meeting and lead- ing the post meeting follow-up
DURATION	2 days
FINANCIAL IMPLICATIONS	R140 per participant for tuition and R280 per participant for accommodation and meals
The principal Mr MJ Paulse P.O. Box 54, ELSENBURG 7607	

Fort Cox College of Agriculture and Forestry

Tel (021) 808-5450/3 Fax (021) 884-4319

After completion of the courses mentioned below, the participants will either be awarded a certificate of competency or a certificate of attendance

Pig production				
OBJECTIVE		To equip participants with the modern technology of farming with pigs on a small and large scale.		
CONTENT		To offer participants the practical learning experience, the course offers the following learning areas: Description of local pig industry, housing of piglets, breeding boar and sow and farrowing sows, feeding of piglets, breeding boar and sow and pregnant sows, management of pig diseases, general pig hus- bandry, selling of pigs, industry and market-related aspects		
DURATION		10 days		
FINANCIAL IMPLICATIONS		R950 per participant for tuition, R500 per participant for accommodation, R600 per participant for meals		
Egg production				
OBJECTIVE		To equip participants with the modern technology of producing eggs on a small and large scale		
CONTENT		To offer participants the practical learning experience, the course offers the following learning areas: Description of local egg industry, housing of hens, feeding of pullets and layers, management of poultry diseases, hygiene programme, frequent poultry diseases, eggs, general		
DURATION		5 days		
FINANCIAL IMPLICATIONS		R560 per participant for tuition, R250 per participant for accommodation, R300 per participant for meals		
Broiler product	ion			
OBJECTIVE		To equip participants with the modern technology of producing poultry meat on a small and large scale		
CONTENT		To offer participants the practical learning experience, the course offers the following learning areas: Nature of local broiler industry, important aspects involving chicks, housing of broiler chickens, feeding of broiler chickens, management of poultry diseases, selling of chickens, key determinants of a successful broiler unit		

DURATION	5 days
FINANCIAL IMPLICATIONS	R560 per participant for tuition, R250 per participant for accommodation, R300 per participant for meals
Dairy production	
OBJECTIVE	To equip participants with the modern technology of dairy production on a small and large scale
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Introduction to local dairy industry, dairy infrastruc- ture, feeding of dairy calves, heifers, cows and bulls, management of herd health, milk production, general livestock husbandry, milk
DURATION	10 days
FINANCIAL IMPLICATIONS	R850 per participant for tuit <mark>ion, R500 per participan</mark> t for accommodation, R600 per participant for mea <mark>ls</mark>
Beef production	
OBJECTIVE	To equip participants with the modern technology of beef production on a small and large scale
CONTENT	To offer participants the prac <mark>tical learning experience,</mark> the course offers the following learning areas: Introduction to local beef industry, management of reproduction, feeding of beef cattle, management of herd health, general beef husbandry, selling of beef
DURATION	10 days
FINANCIAL IMPLICATIONS	R850 per participant for tuition, R500 per participant for accommodation, R600 per participant for meals
Goat production	
OBJECTIVE	To equip participants with the modern technology of goat production on a small and large scale
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Introduction of local goat industry, management of reproduction, feeding of goats, management of goat flock health, fibre technology, general goat husbandry, selling of goat products
DURATION	5 days
FINANCIAL IMPLICATIONS	R550 per participant for tuition, R250 per participant for accommodation, R300 per participant for meals
Sheep production	
OBJECTIVE	To equip participants with the modern technology of sheep production on a small and large scale.
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Introduction to local sheep industry, management of reproduction, feeding of sheep, management of sheep flock health, fibre technology, general goat husbandry and selling of sheep products
DURATION	5 days
FINANCIAL IMPLICATIONS	R550 per participant for tuition, R250 per participant for accommodation, R300 per participant for meals

Land-based entrepreneurship

OBJECTIVE	To introduce participants who have either little or no knowledge of business principles
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: What is land-based entrepreneurship? Building a land-based business, marketing of land-based products, buying and costing, money matters
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 000 per participant for tuition, R500 per participant for accommodation, R600 per participant for meals

Value adding technology

OBJECTIVE To equip participants with skills and knowledge of packaging and marketing high-value products for export purposes

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: What is value adding technology?, Abattoirs, processing, export markets

DURATION 5 days

FINANCIAL IMPLICATIONS R550 per participant for tuition, R250 per participant for accommodation, R300 per participant for meals

Technology of field crop production

OBJECTIVE To equip participants with the modern technology of field crop production on a small and large scale.

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Field crop production in South Africa, growing field crops, pest control, disease control, crop yields, marketing of crops

DURATION 10 days

FINANCIAL IMPLICATIONS R850 per participant for tuition, R500 per participant for accommodation, R600 per participant for meals

Technology of vegetable production

OBJECTIVE To equip participants with the modern technology of vegetable production on a small scale or large scale

CONTENT To offer participants the practical learning experience, the course offers the following learning areas: Vegetable production in South Africa, vegetables, pest control, disease control, marketing of crops and other aspects

DURATION 10 days

FINANCIAL IMPLICATIONS R850 per participant for tuition, R500 per participant for accommodation, R600 per participant for meals

Farm buildings and surveys

OBJECTIVE	To equip participants with theoretical and practical theory of building con- struction
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Farm buildings, the actual building, land surveys and other aspects

DURATION 10 days

DURATION	10 days
FINANCIAL IMPLICATIONS	R850 per participant for tuition, R500 per participant for accommodation, R600 per participant for meals
Applied information tech	nology
OBJECTIVE	To introduce participants to the application of computer business, including agriculture
CONTENT	To offer participants the practical learning experience, the course offers the following learning areas: Introduction to computers, use of computer software, internet, computer application
DURATION	10 days
FINANCIAL IMPLICATIONS	R850 per participant for tuition, R500 per participan <mark>t for accommodation,</mark> R600 per participant for mea <mark>ls</mark>
The principal Mr A Sonandi PO Box 2187 King William's Town 5600 South Africa Tel (040) 653-8033/4/5 Fax (040) 653-8036/40	

Glen College of Agriculture

After completion of the courses mentioned below, the participants will either be awarded a certificate of competency or a certificate of attendance

Building	
OBJECTIVE	The course deals with practical building methods
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Reading of building plans, planning and choice of site, basic building materials, concrete laying, brickwork, plastering, planning for doors, windows, roofs and gutters, painting, plumbing, reservoirs and channels
DURATION	5 days
FINANCIAL IMPLICATIONS	R250 per participant for tuition, R100 per participant for accommodation, R50 per participant for meals per day
Farm mechanics	
OBJECTIVE	The course deals with the practical learning experience of farming machines and implements
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Functioning and operation of industrial, agricultural and automotive machines, internal combustion engines, operation of manual gearboxes and differentials, farm machinery safety standards, assembling and dismantling of engines, starting of petrol and diesel engines and testing and adjustment of diesel injectors
DURATION	5 days
FINANCIAL IMPLICATIONS	R250 per participant for tuition, R100 per participant for accommodation, R50 per participant for meals

Introduction to Value Added Tax

- OBJECTIVE The course attempts to give practical guidance to vendors in order to inform businesses and compliance
- CONTENT To offer participants the practical learning experience, the course covers the following learning areas: The course offers practical exposure to farmers/ farm managers on what VAT is—how it works, how to register, taxable supplies and VAT returns
- DURATION 1 day
- FINANCIAL IMPLICATIONS R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals

Tractor maintenance, management and driving

- OBJECTIVE The course deals with the practical methods of maintaining a tractor and the ability to drive a tractor
- CONTENT To offer participants the practical learning experience, the course covers the following learning areas: General function and maintenance of a tractor; different parts of the engine; checking water, oil and tyre pressure; operation and adjustment of lift operation; power take-off; correct gear changing
- DURATION 5 days
- FINANCIAL IMPLICATIONS R250 per participant for tuition, R100 per participant for accommodation, R50 per participant for meals

Extension programme and evaluation

OBJECTIVE	To capacitate learners with skills in planning and evaluation of extension pro- grammes
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Principles of programme planning; knowledge/information to be collected before planning an extension programme; factors to be considered in choosing extension methods to be used; implementation
DURATION	strategy; evaluation of extension programmes; evaluation of a programme
DORATION	T day
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Group dynamics	
oroup dynamics	
OBJECTIVE	The course deals with the practical principles of group counteraction and dynamics
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Internal dynamics of groups, forces causing internal dynamics, external dynamics in groups, guidelines for initiating changes
	in groups, factors to be considered when initiating change in a group
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Rural community need in	dentification and analysis

OBJECTIVE The course deals with the practical methods of need identification and analysis within rural communities

CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Basic concepts, process of needs identification; needs identification techniques i.e. questionnaires, rapid rural appraisal and interviews	
DURATION	1 day	
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals	
Agricultural strategies for transfer of technology		
OBJECTIVE	The course deals with the practical methods on extension approaches in transfer of technology in agriculture	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Extension approaches in transfer of technology in agriculture, agencies involved in transfer of technology, strategies used in the transfer of agricultural technology	
DURATION	1 day	
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals	
Beef cattle management		
OBJECTIVE	The course deals with the m <mark>anagement and productio</mark> n of beef cattle	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Breeding season, mating principles, management of heifers, managing cows with calves, managing the breeding bull, feeding beef cattle	
DURATION	2 days	
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R40 per participant for accommodation, R20 per participant for meals	
Cultivation of cultivated	pastures	
OBJECTIVE	The course deals with the practical methods experienced regarding cultivat- ed pastures	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Identification of some cultivated pastures, planting, fertilisation and utilisation	
DURATION	1 day	
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals	
Cultivation of lucerne		
OBJECTIVE	The course deals with the practical methods of harvesting baling of lucerne	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Harvesting and baling of lucerne on the land	
DURATION	1 day	
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals	

Plant identification of veld pastures

OBJECTIVE	The course deals with the practical methods of being able to identify differ- ent grass types
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Identification of plants in the classroom and veld, names of most common plants, location of different plant species, classification of different grass species
DURATION	2 days
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R40 per participant for accommodation, R20 per participant for meals
Soil classification	
OBJECTIVE	The course deals with the practical methods to assess different soils
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: The reasons for different soils and the implication thereof on vegetable and crop farming
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Disease control	
OBJECTIVE	The course deals with the most common diseases of cattle
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Causes, clinical signs, diagnosis, treatment and control of these diseases, diseases like black quarter, anthrax, TB, brucelosis, digestion disturbance, etc
DURATION	2 days
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R40 per participant for accommodation, R20 per participant for meals
Arc welding	
OBJECTIVE	The course deals with the practical methods in arc welding skills
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Safety aspects of arc welding, using the arc welding set, different welding processes, different methods of welding, cast work, different joints
DURATION	5 days
FINANCIAL IMPLICATIONS	R250 per participant for tuition, R100 per participant for accommodation, R50 per participant for meals
Gas welding	
OBJECTIVE	The course deals with the practical methods to do gas welding
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Safety aspects of gas welding, using the gas welding set, lighting and extinguishing the flame, gas cutting, hard soldering, brazing, welding metal with metal.
DURATION	5 days

FINANCIAL IMPLICATIONS	R250 per participant for tuition, R100 per participant for accommodation, R50 per participant for meals
Calculation of plant dens	sity and yield
OBJECTIVE	The course deals with the methods to calculate the plant density with an aim of calculating expected yield
CONTENT	To offer participants the practical learnin <mark>g experience, the c</mark> ourse covers the following learning areas: Calculation of plant density, yield estimation
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Handling of pesticides a	nd herbicides
OBJECTIVE	The course deals with the practical methods of safe application of pesticides and herbicides to plants
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Handling pesticides and herbicides, mixing pesticides and herbicides, spraying of pesticides and herbicides, safety precautions
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuitio <mark>n, R20 per participant for</mark> accommodation, R10 per participant for meals
Calibration of implement	ts: boom sprayers
OBJECTIVE	The course deals with the practical methods to calibrate a boom sprayer
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Calibration of seed drill, precision planters, pesticide sprayers and fertiliser spreaders
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Personnel management	
OBJECTIVE	The course attempts to define personnel management and identify the unique characteristics of labour management on farms
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Exposure to farmers/farm managers on the basic principles and legislative framework. It covers the following learning areas: general orientation, recruitment, motivation of workers, remuneration and grievance resolution in handling planting implements safely
DURATION	1 day each
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Marketing	
OBJECTIVE	The course deals with different facets of marketing farm produce
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: basic principles of marketing and the legislative

	framework of marketing agricultural products. This will include learning areas such as: general introduction, demand, supply, price determination and marketing strategy
DURATION	1 day
FINANCIAL IMPLICATIO	NS R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Mutton technology	
OBJECTIVE	The course deals with new methods in mutton technology
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Classification of live animals, curing of hides, classification of meat on the hook, dressing of meat, use of different meat cuts, basic hygiene and ripening, processing and cooking of meat
DURATION	3 days
FINANCIAL IMPLICATIO	NS R150 per participant for tuition, R60 per participant for accommodation, R30 per participant for meals
Wool classing	
OBJECTIVE	The course deals with the preparation and classification of wool
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Picking-up and throwing fleeces, identification of different parts of the fleece, skirting, typing, grouping, classing of broken fleeces and bellies and pieces into various lines
DURATION	5 days
FINANCIAL IMPLICATIO	ONS R250 per participant for tuition, R100 per participant for accommodation, R50 per participant for meals
Dairy management	
OBJECTIVE	The course deals with the management of a milking parlour
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Cleaning the milking parlour, cleaning equipment, maintenance of equipment, the milking process, management of the milking process
DURATION	2 days
FINANCIAL IMPLICATIO	NNS 100 per participant for tuition, R40 per participant for accommodation, R20 per participant for meals
Farm accounting	
OBJECTIVE	The course attempts to introduce learners to systematic farm accounting systems
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Excellent experiential exposure to farmers/farm managers on the basic accounting systems on farms. It covers the following learning areas: filing, physical and financial records/statements, analysis of financial statements (solvency, liquidity and profitability)
DURATION	1 day

FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals
Döhne course	
OBJECTIVE	The course deals with the practical methods on the Döhne goat breed
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Standards of excellence, judging different body parts of Döhne merinos, judging the wool, classing different individuals in terms of excellence
DURATION	2 days
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R40 per participant for accommodation, R20 per participant for meals
Farm budgets	
OBJECTIVE	The course attempts to prac <mark>tically illustrate procedur</mark> es on how to compile various farm budgets and their importance to farm management
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Exposure to farmers/farm managers on how to compile and analyse the following: enterprise budget, partial budget and break-even budget. Practical exercises will be given to learners to practically apply their budgeting skills
DURATION	1 day
FINANCIAL IMPLICATIONS	R50 per participant for tuition, R20 per participant for accommodation, R10 per participant for meals per day
The principal Mr JJ Snyman Private Bag X01, GLEN 9360 Tel (051) 861-1012 Fax (051) 861-1122	

Grootfontein Agricultural Development Institute

After completing the courses mentioned below, participants will either be awarded a competency certificate or a certificate of attendance

Inseminator course (small stock)

OBJECTIVE	The course deals with practical methods of how to artificially inseminate
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Theory and technique of the nonsurgical artificial insemination of animals, the anatomy of the genital system of male and female animals, physiology and diseases of reproduction, the principles of veterinary hygiene, the elementary theory of livestock breeding and genetics, the theory and practice of the conveyance of semen, legislation regarding the collection, sale and conveyance of semen and the artificial insemination of animals
DURATION	5 days
FINANCIAL IMPLICATIONS	R215 per participant for tuition, R375 per participant for accommodation*

^{*} Accommodation includes meals

Computer beginners (end user computing)

OBJECTIVE	The course deals with basic principles on how to use a computer
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Windows and MS Office, MS Exel, Internet as well as PowerPoint
DURATION	5 days
FINANCIAL IMPLICATIONS	R215 per participant for tuition, R375 per participant for accommodation*

Computer introduction course (basics)

OBJECTIVE	The course deals with the basics of computer hardware and software
CONTENTS	To offer participants the practical learning experience, the course covers the following learning areas: Computer software and hardware and the use of a mouse
DURATION	1 day
FINANCIAL IMPLICATIONS	R43 per participant for tuition, R75 per participant for accommodation*

Computer advanced (end user computing)

OBJECTIVE	The course deals with basic principles of how to use a computer in a farm- ing business
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Windows and Ms Office, Ms Excel, Internet as well as Ms PowerPoint
DURATION	5 days

FINANCIAL IMPLICATIONS R215 per participant for tuition, R375 per participant for accommodation*

Farm mechanic work (petrol)

OBJECTIVE	The course deals with the practical methods on how to fix farm machinery (petrol)
CONTENTS	To offer participants the practical learning experience, the course covers the following learning areas: Maintenance, routine inspection, daily inspection, services, replacing of oil, filters and grease, inspection of brakes, bearings, leaks and cleaning of engines
DURATION	1 day

FINANCIAL IMPLICATIONS R43 per participant for tuition, R75 per participant for accommodation*

Farm mechanic work (diesel)

OBJECTIVE	The course deals with the basic maintena (diesel)	nce and fixing of farm machinery
CONTENTS	To offer participants the practical learning following learning areas: Maintenance, ro services, replacing of oil, filters and greas leaks and the cleaning of engines	utine inspection, daily inspection,
DURATION	1 day	
FINANCIAL IMPLICATION	<mark>S R43 per participan</mark> t for tuition, R75 per pa	rticipant for accommodation*

Resource poor farming			
OBJECTIVE	The course deals with techniques to improve the lives of farmers who have access to limited resources and the emerging farmers in the agricultural sector to ensure that they become successful subsistence farmers		
CONTENTS	To offer participants the practical learning experience, the course covers the following learning areas: Vegetable, broiler, egg, fodder and small stock pro- duction systems		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R86 per participant for tuition, R150 per participant for accommodation*		
Permanent marking of li	vestock		
OBJECTIVE	The course deals with the correct practical methods of permanent marking of livestock		
CONTENT	To offer participants the prac <mark>tical learning experience,</mark> the course covers the following learning areas: Safe use of marking equipment and the correct manner of marking		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R86 per participant for tuition, R150 per participant for accommodation*		
Wool course for registra	tion		
OBJECTIVE	The course deals with practice and theory of classifying wool		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Shearing shed facilities, classing, packing, marking of containers, physical properties of wool, picking up and throwing and skirting of fleeces, judging, single typing and identification of fleece samples, cast fleeces and grouping		
DURATION	5 days		
FINANCIAL IMPLICATIONS	R215 per participant for tuition, R375 per participant for accommodation*		
Cactus pear fruit produc	tion		
OBJECTIVE	The course deals with the correct practical methods of how to produce cac- tus pears for marketing		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Cultivation of cactus pear fruit for the fresh market		
DURATION	2 days		
FINANCIAL IMPLICATIONS	R86 per participant for tuition, R150 per participant for accommodation*		
Meat processing			
OBJECTIVE	The course deals with the basic principles of identifying carcass cuts and the roller		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Identification of carcass cuts and roller marking of carcasses, use of machinery and equipment used in the processing of meat, making of different types of sausages, salt meat, biltong, dried sausage, smoked meat, tripe and liver dishes		
DURATION	4 days		

FINANCIAL IMPLICATIONS R172 per participant for tuition, R300 per participant for accommodation*

The principal Mr S Schoonraad Grootfontein Agricultural Development Institute Private Bag X529, GROOTFONTEIN 5900 Tel (049) 842-1113 Fax (049) 842-4352

Lowveld College of Agriculture

After completing the courses mentioned below, participants will either be awarded a Competency certificate or a certificate of attendance

Cotton production

OBJECTIVE	The course deals with the practical methods of cotton production
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Production of cotton, servicing, maintenance and operation of irrigation systems
DURATION	20 days
FINANCIAL IMPLICATIONS	R2 000 per participant for tuition, R500 per participant for accommodation, R1 200 per participant for meals

Table grape production

OBJECTIVE		The course deals with the practical methods of table grape production
CONTENT		To offer participants the practical learning experience, the course covers the following learning areas: Production of table grapes, servicing, maintenance
		and operation of irrigation systems
DURATION		15 days
FINANCIAL IMPLI	CATIONS	R1 500 per participant for tuition, R750 per participant for accommodation, R900 per participant for meals

Irrigation operation and maintenance

OBJECTIVE		The cou	purse deals with the practical methods of cotton production
CONTENT		To offer participants the practical learning experience, the course covers the following learning areas: Operation of irrigation systems maintenance and servicing	
DURATION		10 days	ys
FINANCIAL IMPLIC	CATIONS		0 per participant for tuition, R500 per participant for accommodation, per participant for meals
The principal Dr MS Kgaphola Lowveld College of Private Bag X1128 NELSPRUIT 1200		ire	

Tel (013) 753-3064 Fax (013) 755-1110

Madzivhandila College of Agriculture

After completing the courses mentioned below, the participants will either be awarded a competency certificate or a certificate of attendance

Broiler production			
OBJECTIVE	The course aims at training participants to improve their broiler production management skills so that they could be able to perform their daily activities in a broiler unit		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Broiler breeds and breeders, house brooding preparation, feeding, disease control record-keeping, and marketing strategy		
DURATION	49 days		
FINANCIAL IMPLICATIONS	R1 960 per participant for tuit <mark>ion, R1 200 per participan</mark> t for accommodation, R2 646 per participant for m <mark>eals</mark>		
Irrigation practices			
OBJECTIVE	The course aims at improvin <mark>g participants' ability to s</mark> chedule irrigation in a more economic and cost-effe <mark>ctive way</mark>		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Irrigation criteria and scheduling, advantages of irrigation scheduling, crops, sensitivity to water shortage, and determining the irrigation schedules for crops using various methods		
DURATION	5 days		
FINANCIAL IMPLICATIONS	R240 per participant for tuition, R225 per participant for accommodation, R270 per participant for meals		
Pig production			
OBJECTIVE	The course aims at training participants to improve their production of pigs through better management practices		
CONTENT	To offer participants the practical learning experience. The course covers the following learning areas: Pig breeds, management of mating to furrowing, care of piglets from birth to marketing, feeding, control of parasites, marketing of pigs, record-keeping		
DURATION	10 days		
FINANCIAL IMPLICATIONS	R560 per participant for tuition, R225 per participant for accommodation, R540 per participant for meals		
Safe use of chemicals			
OBJECTIVE	The course aims at improving the use of crop protection chemicals by the farmers		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Agrochemicals and their hazardous effects, dermal absorption, inhalation, oral ingestion, types of protective clothing, identification of product labels, transportation of chemicals, storage of chemicals, cleaning of spillage in the storehouse, calibration of the knapsack sprayer, spray tip selection emergency procedures		
DURATION	5 days		
FINANCIAL IMPLICATIONS	R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals		

Soil sampling and fertiliser application

- OBJECTIVE The course aims at training participants on soil sampling procedures and the handling of related equipment
- CONTENT To offer participants the practical learning experience, the course covers the following learning areas: Definition of soil samples, identification of soil colour, texture and structure, soil sampling techniques, as well as preparation of standard representative sample

DURATION 5 days

FINANCIAL IMPLICATIONS R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals

Fertiliser and its management

OBJECTIVE The course aims at helping participants understand and be able to identify types of fertilisers available on the market, calculate nutrient contents of each fertiliser, and draw up a correct and profitable fertiliser programme

CONTENT To offer participants the practical learning experience, the course covers the following learning areas: Types of fertiliser, calculation of nutrient contents, methods of applying fertilisers, time of fertiliser application, fertilisation programmes, economics of fertiliser application and the environmental impact of fertilisers

DURATION 5 days

FINANCIAL IMPLICATIONS R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals

Basics of fertiliser application

OBJECTIVE	The course is designed for people who cannot read or write or those with pri- mary education and is aimed at training them on fertiliser usage	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Identifying types of fertiliser, select correct size of fertiliser application cups, how to apply fertiliser by hand, and what to do after applying fertiliser application	
DURATION	5 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals	
Tractor maintenance		
OBJECTIVE	The course aims at improving tractor utilisation efficiency and maintenance of tractors and other farm equipment	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Selection of farm machinery, understanding how the engine functions, internal and external parts of the engine, different systems, cooling, lubrication, fuel, electrical and hydraulic, transmissions, etc	
DURATION	5 days	
FINANCIAL IMPLICATIONS	R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals	
Vegetable productio <mark>n</mark>		
OBJECTIVE	The course aims at providing participants with working knowledge in the pro- duction of vegetables	

CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Classification of vegetables, climatic requirements, soil requirements, vegetable cultivars, production of seedlings, transplanting,		
	irrigation, fertiliser requirements, weeds, pest and disease control, as well as harvesting and marketing.		
DURATION	120 days		
FINANCIAL IMPLICATIONS	R4 760 per participant for tuition, R3 00 <mark>0 per participant for</mark> accommodation, R6 480 per participant for meals		
Vegetable achaar proces	sing		
OBJECTIVE	The course aims at developing knowledge and skills for processing vegetables		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Hygienic considerations when handling food, veg- etable classifications, nutritive value of vegetables, identifying ingredients and equipment to be used and labeling		
DURATION	3 days		
FINANCIAL IMPLICATIONS	R210 per participant for tui <mark>tion, R50 per participan</mark> t for accommodation, R162 per participant for meals		
Mango achaar processing	g		
OBJECTIVE	The course aims at developin <mark>g knowledge and skills fo</mark> r processing fruit		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Hygienic considerations when handling food, timing of the season for the making of achaar, mango identification, ingredients and equipment to be used, the nutritive value of vegetables and type of containers to be used for preserving achaar		
DURATION	3 days		
FINANCIAL IMPLICATIONS	R210 per participant for tuition, R50 per participant for accommodation, R162 per participant for meals		
Veld management			
OBJECTIVE	The course aims at improving pasture management and training farmers on how they can preserve feeds for their animals		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Common gasses and their characteristics, grass species, trees and shrub species, ecology of grasses, fodder reserves (hay and silage) and animal fodder flow		
DURATION	5 days		
FINANCIAL IMPLICATIONS	R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals		
Peanut butter making			
OBJECTIVE	The course aims at developing knowledge and skills of processing ground- nuts		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Hygienic considerations when handling food, nutri- tive value of groundnuts, ingredients and equipment used for processing peanut butter, storage and type of containers to be used		

DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition, R50 per participant for accommodation, R162 per participant for meals
Maas and yoghurt proc	essing
OBJECTIVE	The course aims at developing knowledge and skills of manufacturing dairy products
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Milk hygiene and the handling of milk, the nutritive value of milk and identifying ingredients and equipment for making yoghurt and maas
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition, R50 per participant for accommodation, R162 per participant for meals
Cheddar cheese making)
OBJECTIVE	The course aims at developing knowledge and skills of manufacturing dairy products
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Milk hygiene and handling of milk products, the nutritive value of cheese and the types of cheese that can be found on the market
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition, R50 per participant for accommodation, R162 per participant for meals
Milk processing	
OBJECTIVE	The course aims at developing knowledge and skills of manufacturing dairy products
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Processing of yoghurt according to relevant proce- dures and standards, manufacturing maas according to the set procedures and standards, processing of cheese (cottage cheese) according to the pro- cedures and standards set for the production of cheese
DURATION	3 days
FINANCIAL IMPLICATIONS	R210 per participant for tuition, R50 per participant for accommodation, R162 per participant for meals
Artificial insemination ((AI)
OBJECTIVE	The course aims at equipping participants with knowledge and skills on arti- ficial insemination
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Physiology of the female reproductive system, the AI equipment, AI techniques and the post-insemination handling of animals

DURATION 5 days

FINANCIAL IMPLICATIONS R410 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals

Livestock management	
OBJECTIVE	The course aims at equipping and train <mark>ing livestock partici</mark> pants to improve livestock production and gain managerial skills
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Dairy heifer rearing, dairy herd record-keeping, reproduction and milking machine management, greater emphasis on practical aspects such as ratio balancing, feedlotting, dairy cattle diseases and maintenance
DURATION	10 days
FINANCIAL IMPLICATIONS	R560 per participant for tuition, R225 per participan <mark>t for accommodation</mark> , R540 per participant for meals
Running a small farming	j business
OBJECTIVE	The course aims at improving the knowledge of the participants to increase productivity and to be aware of production activities in a farming environment
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Establishment of an enterprise, its operation, its customers and factors influencing them; profitability, working environment and working efficiently
DURATION	5 days
FINANCIAL IMPLICATIONS	R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals
Agricultural finance	
OBJECTIVE	The course aims at exposing participants to different sources of agricultural finance, how to access finance and the impact of borrowed funds
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Sources of agricultural finance, categories of agricultural finance, use of credit, correct type and amount of credit, effect and redemption period on the cost of credit
DURATION	5 days
FINANCIAL IMPLICATIONS	R280 per participant for tuition, R100 per participant for accommodation, R270 per participant for meals
Compost making	
OBJECTIVE	The course aims at training participants on how to make compost and the importance of using it
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Definition of compost, selection of suitable materials, choice of site for compost making, principles of compost making, techniques and handling of equipment and the maintenance maintenance of
	compost heap
DURATION	compost heap 5 days

The principal Ms MC Tshisikule Private Bag X5024, THOHOYANDOU 0950 Tel (015) 962-7200/7/8 Fax (015) 962-1320

Owen Sitole College of Agriculture

After completing the courses mentioned below, the participants will either be awarded a competency certificate or a certificate of attendance

Fruit	produ	iction

OBJECTIVE		The course deals with the practical methods of planting bananas or citro selecting and schedule irrigation, fertilising and managing an orchard				
CONTENT			participan g learning		g experience,	the course covers the
		Banana transpla ease co	nting of band	n in SA, method of pro nanas, fertilisation, irr esting of bananas, pack nd the transplanting o	igation mana (aging, ripenir	gement, pest and dis-
		Layout planting orchard ing of ci) of citrus t s, integrate	rees, citrus irrigation n d pest management (ng, packaging, marketi	nanagement, IPM), forms o	on), propagation and weed control in citrus f fertilisation, harvest- ce of selection and the
DURATION		10 days				
FINANCIAL IMPLIC	ATIONS		• •	ant for tuition, R450 nt for meals	per participan	t for accommodation,
Poultry production	on					
OBJECTIVE				with the practical and ultry farm successfully		nethods to enable the y
CONTENT		following bility/res ment dis ing, chie wastage	g learning a search on b splay, litter ck behavio e, vaccines	areas: Introduction to b roilers, house preparati management and its pr ur, temperature and h	proilers, budge ion, cleaning a oblems, rearir iumidity, disea je and handlir	and disinfection, equip-
DURATION		10 days				
FINANCIAL IMPLIC	ATIONS			pant for tuition, R450 nt for meals	per participar	nt for accommodation,
Pig production						
OBJECTIVE			cal knowle			with the practical and farm pigs successfully

CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Introduction to pigs, budgeting for pigs, feasibility/ research on pork, house preparation and furrowing, cleaning and disinfection, equipment display, litter management, rearing of piglets, diseases, feed types, feed wastages, ingredients, general medication, and record-keeping
URATION	10 days
FINANCIAL IMPLICATIONS	R1 300 per participant for tuition, R450 per participant for accommodation, R450 per participant for meals
Business skills	
OBJECTIVE	The course deals with the practical and theoretical methods to enable farm- ers to evaluate the modern market for opportunities, apply sound business principles and decision making in order to run a business profitably
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Identification of enterprise, record-keeping, understanding the concept of income, expenses and profit/loss, economic principles and marketing, business plans, production plans and cash flow as well as risk management
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 300 per participant for tu <mark>ition, R450 per participan</mark> t for accommodation, R450 per participant for mea <mark>ls</mark>
Vegetable production	
OBJECTIVE	The course deals with the practical and theoretical methods required for the successful and profitable production of vegetables
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: classification of vegetable crops according to their botanical families and climatic requirements, site and location of gardens and garden layouts, establishing and management of a vegetable farm, crop rotation, soil, fertiliser and water requirements for different vegetable crops, pests and diseases management, responsible use of chemicals, harvesting, storage and marketing of vegetables, as well as economics of vegetable production
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 300 per participant for tuition, R450 per participant for accommodation, R450 per participant for meals
Consumer science	
OBJECTIVE	The course deals with the practical and theoretical methods required to assist in catering for functions and residential groups successfully
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: basic equipment used in the catering industry, correct measuring techniques, hygiene in the cooking environment, table setting—formal and informal, cuisines, basic baking, advanced baking, icing batters and droughts, yeast, menu planning, cooking a three course meal, hors-d'oeuvres, and finger meals, buffet
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 300 per participant for tuition, R450 per participant for accommodation, R450 per participant for meals

Dairy production

OBJECTIVE	The course deals with the practical and theoretical methods required to farm with dairy animals and production systems profitably and successfully	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Introduction and characterisation of breeds, breeds for dairy, breeding and selection, oestrus management, basic husbandry practices and identification, artificial calf rearing, mastitis, basic milk handling and hygiene, care and feeding of replacement heifers and of dry and post-parturient cows, hand and machine milking, condition scoring and visual appraisal, nutritional requirements of a dairy cow as well as basic health management	
DURATION	10 days	
FINANCIAL IMPLICATIONS	R1 300 per participant for tuition, R450 per participant for accommodation, R450 per participant for meals	
Beef production		
OBJECTIVE	The course deals with the practical and theoretical methods required to farm with beef cattle and production systems successfully and profitably	
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Introduction and characterisation of breeds, breeds for beef production, breeding and selection, basic husbandry practices and identification, calf rearing, care and feeding of replacement heifers, cow and bull management, condition scoring and visual appraisal, feedlot management, transportation of cattle and marketing	
DURATION	10 days	
FINANCIAL IMPLICATIONS	R1 300 per participant for tuition, R450 per participant for accommodation, R450 per participant for meals	
The principal, Mr A Foli Private Bag X20013, EMPANGENI 3880 Tel (035) 795-1345 Fax (035) 795-1379		

Potchefstroom College of Agriculture

After completing the courses mentioned below, participants will either be awarded a competency certificate or a certificate of attendance

Artificial insemination

OBJECTIVE	The course deals with insemination, i.e. how to inseminate artificially	
CONTENT	The course offers practical learning experience to participants and cover practical methods of artificial insemination	rs
DURATION	5 days	
FINANCIAL IMPLICATION	R259,40 per participant for tuition only	

Financial management

r manorar management	
OBJECTIVE	The course deals with basic financial management skills needed to run a farm
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Determination of whether a farm is making a profit or is running at a loss
DURATION	2 days
FINANCIAL IMPLICATIONS	R100 per participant for tuition only
Feedlot management	
OBJECTIVE	The course deals with basic methods needed to manage a feedlot
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Housing, feeding, hygiene, purchasing of cattle, finding a market for cattle and the financial management of a feedlot
DURATION	1 day
FINANCIAL IMPLICATIONS	R20 per participant for tuition only
Horticulture	
OBJECTIVE	The course deals with basic methods of horticulture needed to a farm effec-
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Soil preparation, fertilising, pest control, weed con- trol, cultivars, compiling a budget and the marketing of horticultural products
DURATION	4 days
FINANCIAL IMPLICATIONS	R80 per participant for tuition only
Small-scale dairying	
OBJECTIVE	The course deals with the nutritional management of factors affecting the running of a small dairy herd, including zero-grazing to grazing systems
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Cross-breeding, basic nutrition, supplementary feeding, calf rearing, milking and its handling
DURATION	1 day
FINANCIAL IMPLICATIONS	R20 per participant for tuition only
Welding	
OBJECTIVE	The course deals with basic methods of welding
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Welding, safety methods and the use of welding materials
DURATION	4 days
FINANCIAL IMPLICATIONS	R80 per participant for tuition only

The principal Mr JL Venter Private Bag X804, POTCHEFSTROOM 2520 Tel (018) 299-6556 Fax (018) 299-3925

Tompi College of Agriculture

After completion of the courses mentioned below, the participants will either be awarded a certificate of competency or a certificate of attendance

Pia p	rodu	ction

OBJECTIVE	The course deals with the practical and theoretical methods of pig produc- tion		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Pig breeding, pig nutrition, disease control, management of pigs, pig reproduction, pig housing, project management, pig business management		
DURATION	10 days		
FINANCIAL IMPLICATIONS	R1 550 per participant for tuition, R100 per participant for accommodation, R400 per participant for meals		
Broiler production			
OBJECTIVE	The course deals with the practical and theoretical methods of broiler pro- duction		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Waste management, diseases in chickens, feeding of chicks, record management, broiler management, poultry housing, brooding management, light management, poultry meat and meat products		
DURATION	42 days		
FINANCIAL IMPLICATIONS	R4 110 per participant for tuition, R420 per participant for accommodation, R1 680 per participant for meals		
Vegetable production			
OBJECTIVE	The course deals with the practical methods of vegetable production		
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Land demarcation, development of planting soil samplings, fertilisation, planting, irrigation, scouting, identification of pests, diseases, weeds, calibration of sprayers, development of a crop budget, development of a business plan, harvesting, post-harvest handling, marketing		
DURATION	100 days		
FINANCIAL IMPLICATIONS	R3 996, 18 per participant for tuition, R1 000 per participant for accommo- dation, R4 000 per participant for meals		
Small stock production			
OBJECTIVE	The course deals with the management of small stock projects in a sustain- able way		

CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Small stock breeding, general flock management, small stock health, small stock feeding, small stock housing, project management, small stock business management
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 550 per participant for tuition, R100 per participant for accommodation, R400 per participant for meals
Dairy production	
OBJECTIVE	The course deals with different breeds, breeding and selection of dairy pro- duction
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Breeding and selection process in dairy cattle, nutrition and feeding of dairy cattle, dairy cattle health—diseases and parasites, dairy production records, rearing of calves, marketing of milk and care of dairy cows
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 550 per participant for tu <mark>ition, R100 per participan</mark> t for accommodation, R400 per participant for mea <mark>ls</mark>
Beef production	
OBJECTIVE	The course deals with the different breeds, breeding and selection process in beef production
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Breeding and selection of beef cattle, nutrition and feeding of beef cattle, beef cattle health—diseases and parasites, beef cattle records, rearing of calves, beef marketing and care of beef cows
DURATION	10 days
FINANCIAL IMPLICATIONS	R1 550 per participant for tuition, R100 per participant for accommodation, R400 per participant for meals
Aquaculture	
OBJECTIVE	The course deals with the practical and theoretical methods of aquaculture
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Identification of potential sites for fish farming, construction of fish ponds, identification and selection of different fish species, stocking of fish, feeding of fish, breeding of fish, netting of fish, harvesting, marketing, water quality management and general management of fish farming
DURATION	60 days
FINANCIAL IMPLICATIONS	R980 per participant for tuition, R600 per participant for accommodation, R2 400 per participant for meals
MS Word	
OBJECTIVE	The course deals with the practical and theoretical applications to use a computer and software
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Windows environment, additional document man-

	agement techniques, Word for Windows basics, additional editing techniques and paragraph formatting
DURATION	5 days
FINANCIAL IMPLICATIONS	R650 per participant for tuition, R40 per participant for accommodation, R2 000 per participant for meals
MS Excel	
OBJECTIVE	The course deals with the practical and theoretical applications to use a computer and software
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Excel basics, entering data and navigating in a marksheet, modifying a workbook, moving and copying data, formatting a worksheet, creating charts, modifying a chart sheet, sorting data, auto filler, advanced formula construction and analysis tools
DURATION	5 days
FINANCIAL IMPLICATIONS	R650 per participant for tuition, R40 per participant for accommodation, R2 000 per participant for meals
The principal Mr NS Sitholimela Private Bag X9619 MARBLE HALL 0450 Tel (013) 268-9300/1/2 Fax (013) 268-9305	

Tsolo College of Agriculture

After completion of the courses mentioned below the participants will either be awarded a certificate of competency or a certificate of attendance

Broiler production

OBJECTIVE		The course deals with modern technology for meat production on a large and small scale
CONTENT		To offer participants the practical learning experience, the course covers the following learning areas: Nature of local broiler industry, purchasing, transport and receival of chicks, housing of broiler chicks, feeding of broiler chicks, management of poultry diseases, care of farm animals, record keeping and marketing concept
DURATION		10 days
FINANCIAL IMPL	ICATIONS	R100 per participant for tuition, R200 per participant for accommodation, R1 200 per participant for meals
Pig production		
OBJECTIVE		The course deals with modern technology of farming with pigs on a small and large scale
CONTENT		To offer participants the practical learning experience, the course covers the following learning areas: Description of local pig industry, housing of piglets, breeding boar, sow and farrowing sows, feeding of piglets, breeding boar, sow and pregnant sows, management of pig diseases, care of farm animals, general pig husbandry, record keeping and marketing concept

DURATION	5 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R100 per participant for accommodation, R600 per participant for meals			
Egg production				
OBJECTIVE	The course deals with modern technology of producing eggs on a small and large scale			
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Description of local egg industry, housing of birds, feeding of pullets and layers, management of poultry diseases, care of animals and eggs, record keeping, agricultural credit and marketing concept			
DURATION	10 days			
FINANCIAL IMPLICATIONS:	R100 per participant for tuit <mark>ion, R200 per participan</mark> t for accommodation, R1 200 per participant for m <mark>eals</mark>			
Vegetable production				
OBJECTIVE	The course deals with modern technology of vegetable production on a small and large scale			
CONTENT	To offer participants the prac <mark>tical learning experience,</mark> the course covers the following learning areas: Vegetable production in South Africa, pest and disease control, record keeping, marketing concept and agricultural credit			
DURATION	5 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R100 per participant for accommodation, R600 per participant for meals			
Field crop production				
OBJECTIVE	The course deals with modern technology of field crop production on a small and large scale			
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Field crop production is South Africa, growing field crops, pest and disease control, crop yield, record keeping, marketing concept and agricultural credit			
DURATION	5 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R100 per participant for accommodation, R600 per participant for meals			
Calibration and maintenance of equipment and machinery				
OBJECTIVE	The course deals with modern technology of machinery and equipment			
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Farm mechanisation, basic tractor maintenance, equipment service and adjustment, calibration of equipment and implements, caring of equipment and machinery			
DURATION	5 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R100 per participant for accommodation, R600 per participant for meals			

Sewing				
OBJECTIVE	The course deals with modern technology used in the clothing industry			
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Handling and using sewing machines, sewing of basic machine stitches, commercial pattern, sewing of different garments, project making, record keeping, marketing concept and agricultural credit			
DURATION	30 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R600 per participant for accommodation, R3 600 per participant for meals			
Baking				
OBJECTIVE	The course deals with modern technology of preserving food and related products			
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Baking, recipe and ingredients, baking bread, buns, scones, baking faults, serving, record keeping, marketing concept and agricultural credit			
DURATION	10 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R200 per participant for accommodation, R1 200 per participant for meals			
Landcare facilitation course				
OBJECTIVE	The course deals with skills on soil, water and nutrient conservation, social facilitation, as well as leadership or management to technical officers working with community groups and other members of the community in landcare groups			
CONTENT	To offer participants the practical learning experience, the course covers the following learning areas: Landcare, organic farming, facilitation aspects, PRA toolbox and project planning			
DURATION	5 days			
FINANCIAL IMPLICATIONS	R100 per participant for tuition, R100 per participant for accommodation, R600 per participant for meals			
The Principal Tsolo College of Agriculture Mr HM Ntsabo Private Bag X1008, TSOLO 5170 Tel (047) 542 0107 Fax (047) 542 0025				

