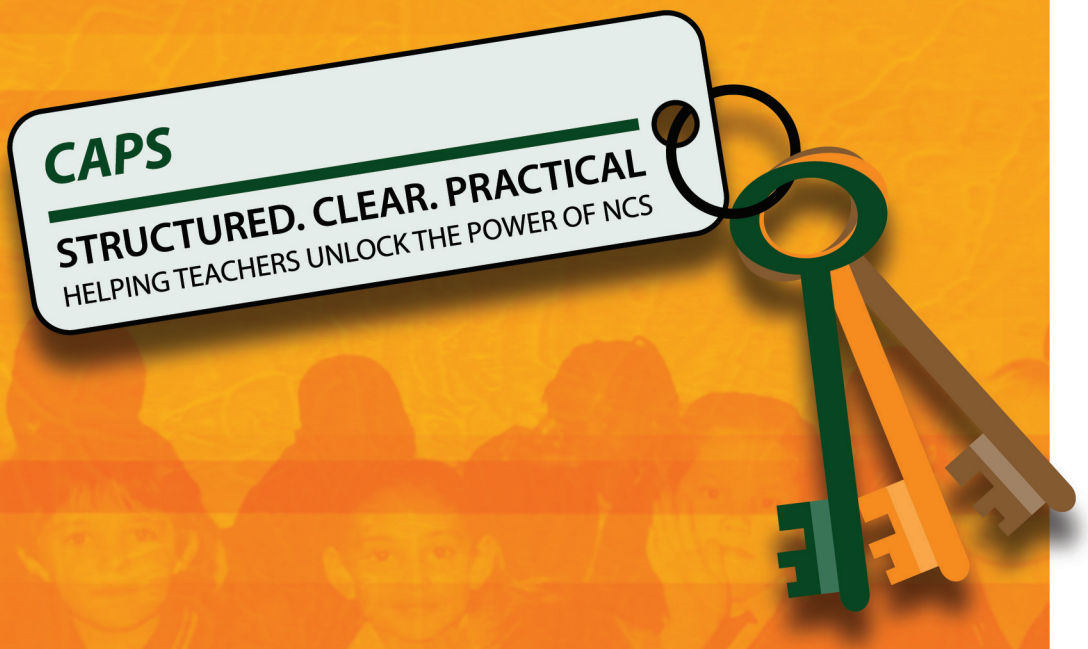
GEOGRAPHY

National Curriculum Statement (NCS)

Curriculum and Assessment Policy Statement



Further Education and Training Phase Grades 10-12

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

CURRICULUM AND ASSESSMENT POLICY STATEMENT
GRADES 10-12

GEOGRAPHY

Department of Basic Education

222 Struben Street
Private Bag X895
Pretoria 0001
South Africa
Tel: +27 12 357 3000
Fax: +27 12 323 0601

120 Plein Street Private Bag X9023
Cape Town 8000
South Africa
Tel: +27 21 465 1701
Fax: +27 21 461 8110
Website: http://www.education.gov.za

© 2011 Department of Basic Education

ISBN: 978-1-4315-0580-7

Design and Layout by: Ndabase Printing Solution

Printed by: Government Printing Works

FOREWORD BY THE MINISTER

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

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

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

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

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

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

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

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

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

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

MRS ANGIE MOTSHEKGA, MP
MINISTER OF BASIC EDUCATION

CONTENTS

SECTION 1: INTRODUCTION TO THE CURRICULUM AND ASSESSMENT POLICY STATEMENTS.. 3

1.1 Background 3

1.2 Overview 3

1.3 General Aims of the South African Curriculum 4

1.4 Time Allocation 6

1.4.1 Foundation Phase 6

1.4.2 Intermediate Phase 6

1.4.3 Senior Phase 7

1.4.4 Grades 10-12 7

SECTION 2: INTRODUCTION TO GEOGRAPHY 8

2.1 What is Geography? 8

2.2 Aims of Geography Studies 8

2.2.1 Geography's four Big Ideas 8

2.2.2 Geographical skills 9

2.2.3 Attitudes and values 9

2.2.4 Asking geographical questions 10

2.3 Time Allocation and Weighting of Topics 11

2.4 Continuity and progression in the Geography curriculum: Grade 4 to 12 11

2.5 Overview of Geography Content in the FET Band 13

2.6 Overview of Geography Skills and Techniques in Grades 10, 11 and 12 15

SECTION 3: OVERVIEW OF TOPICS PER TERM AND ANNUAL TEACHING PLANS 17

3.1 Geography in Grade 10 17

3.2 Geography in Grade 11 27

3.3 Geography in Grade 12 38

SECTION 4: ASSESSMENT IN GEOGRAPHY **49**

4.1 Introduction **49**

4.2 Informal or Daily Assessment **49**

4.3 Formal Assessment **49**

4.3.1 . Summary of formal assessments expected in Grades 10 to 12 50

4.3.2 . Formal assessment requirements for Geography 51

4.4 Programme of Assessment **52**

4.4.1 . Summary of formal Assessment in Grades 10 to 12 53

4.4.2 . Example of possible assessment activities 54

4.5 Recording and Reporting **54**

4.6 Moderation of Assessment **55**

4.7 Annexure **56**

4.7.1 . Format of examinations in Grades 10-12 56

4.7.2 . Assessment in Geography 59

4.8 General **60**

SECTION 1

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

1.1 Background

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

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

1.2 Overview

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.3 General aims of the South African Curriculum

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

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

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

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

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

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

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

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

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

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

1.4 Time Allocation

1.4.1 Foundation Phase

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

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

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

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

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

1.4.2 Intermediate Phase

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

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

1.4.3 Senior Phase

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

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

1.4.4 Grades 10-12

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

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

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

SECTION 2

GEOGRAPHY

2.1 What is Geography?

Geography is the study of human and physical environments. It is a subject that combines topics related to physical and human processes over space and time. With the use of Geography, we can better understand our complex world. There are many branches of study in Geography. For example, in Physical Geography, we examine natural processes and features, including the atmosphere, landforms and ecosystems. In Human Geography, we investigate the activities and impact of people on Earth. The concept that unifies Geography is space. All geographical phenomena have a spatial dimension and operate in a continuously changing environment.

2.2 Geography aims

During Grades 10, 11 and 12 learners are guided towards developing the following knowledge, skills and attitudes:

- explaining and interpreting both physical and human geographical processes;
- describing and explaining the dynamic interrelationship between the physical and human worlds;
- developing knowledge about where places are, and the nature of a range of different places at different scales;
- practising essential transferable skills – literacy, numeracy, oracy and graphicacy;
- promoting the use of new technologies, such as Information Communication Technology (ICT) and Geographical Information Systems (GIS);
- developing a commitment towards sustainable development;
- creating awareness and sensitivity to inequality in the world;
- ostering empathy, tolerance and fairness; and
- making and justifying informed decisions and judgements about social and environmental issues.

2.2.1 Geography's four Big Ideas

Any topic in Geography can be explored by applying a conceptual framework that embraces Geography's four Big Ideas, namely:

- Place
- Spatial processes
- Spatial distribution patterns
- Human and environment interaction

These Big Ideas' are organising concepts that are central to geographical knowledge. Some topics in the curriculum focus on one of the Big Ideas. Other topics require more than one – or even all – of the Big Ideas to be part of the enquiry. Including one or more of the Big Ideas in every enquiry ensures that the focus is essentially geographical.

2.2.2 Geographical skills

The Geography curriculum aims to develop the following subject-specific skills:

- using verbal, quantitative and symbolic data forms such as text, pictures, graphs tables, diagrams and maps;
- practising field observation and mapping, interviewing people, interpreting sources and working with statistics;
- applying communication, thinking, practical and social skills;
- practising the following specific skills:
    - identifying questions and issues;
    - collecting and structuring information;
    - processing, interpreting and evaluating data;
    - making decisions and judgements;
    - deciding on a point of view;
    - suggesting solutions to problems; and
    - working co-operatively and independently.

Geographical education also contributes to the development of personal and social competence.

2.2.3 Attitudes and values

The Geography curriculum aims to foster the following values and attitudes in learners:

- a concern for the sustainable and fair use of resources for the benefit of all;
- recognising the significance of informed decision making;
- the application of geographical knowledge and skills in learners' personal lives;
- respect for the rights of all people; and
- a sense of fairness, sustainability and equality.

2.2.4 Asking geographical questions

The table lists key questions geographers can ask of all geographical phenomena and processes. These questions can be applied within each of the Big Ideas listed above.

Method of enquiry	Key questions	Concepts
Observation	• What is it? • What is it like? • Who or what is affected?	Physical and human processes, awareness, perception, characteristics, similarities and differences
Description	• Where does it occur? • Why is it there?	Location, place, region, space, distribution, pattern, scale and spatial association
Analysis and explanation	• What happened or is happening? • Why did it happen? • How is it changing?	Interdependence, causes and processes
Evaluation and prediction	• What are the effects? • What is likely to happen?	Environmental impact, social impact, interdependence; spatial interaction, spatial organisation, human-environment interaction, cause, process, time, behaviour, consequence, justice, quality of life, environmental quality, welfare, costs and benefits
Decision-making	• Who benefits? • What decisions must be made? • What are the costs and benefits of decisions? • How should it be managed?	Choices, decisions, costs and benefits, planning, management, power, inequality and problem-solving
Personal evaluation, judgement and response	• What is my position? • What action can I take?	Cultural sensitivity, diversity, ethics, opinion forming, empathy, values, action and personal responsibility

2.3 Time Allocation and Weighting of Topics

Geography is allocated four hours of teaching time per week. Revision, consolidation and assessment (formal and informal) are included in this time allocation. The table below shows the total teaching time per term that is assigned to Geography.

Term	Teaching time in weeks	Teaching time in hours
1, 2 and 3 respectively	9 weeks	36 hours
Term 4 (Grades 10 and 11)	6 weeks	24 hours

Four Geography topics are to be studied in each year of the FET Band. Geographical skills and techniques should be integrated with these topics throughout the year.

Each of the sub-topics, in the tables that follow, has been allocated a certain number of teaching hours. **The time is merely a guide**. It does, however, illustrate the weighting for each sub-topic in the context of the term's work.

Six hours of extra-mural fieldwork is recommended in Grade 10 and 11. Grade 12 learners should also do some fieldwork if time allows. Because of time and logistical constraints, much of the fieldwork will need to be conducted outside lesson time. Provision has also been made for two hours of assessment, consolidation and revision per term. During this time tests may be conducted.

2.4 Continuity and progression in the Geography curriculum: Grade 4 to Grade 12

	GEOGRAPHY CONTENT TOPICS GRADES 4 -12
TERM	**GRADE 4**
1	Places where people live
2	Map skills
3	Food and farming in South Africa
4	Water in South Africa
	GRADE 5
1	Map skills (focus: Africa)
2	Physical features of South Africa
3	Weather, climate and vegetation of South Africa
4	Minerals and mining in South Africa
	GRADE 6
1	Map skills (focus: World)
2	Trade (focus: South Africa and World)
3	Climate and vegetation around the world
4	Population - why people live where they do (focus: South Africa and World)
	GRADE 7
1	Map skills (focus: local maps)
2	Earthquakes, volcanoes and floods
3	Population growth and change (focus: World)
4	Natural resources and conservation in South Africa

	GEOGRAPHY CONTENT TOPICS GRADES 4 -12
	GRADE 8
1	Maps and globes (focus: global and local)
2	Climate regions (focus: South Africa and world)
3	Settlement (Africa with a focus on South Africa)
4	Transport and trade (focus: South Africa and world)
	GRADE 9
1	Maps skills (focus: topographic and orthophoto maps)
2	Development issues (focus: South Africa and World)
3	Surface forces that shape the Earth (Physical Geography)
4	Resource use and sustainability (focus: World)
TOPIC	**GRADE 10**
	Geographical skills and techniques: topographic maps, GIS
1	The composition and structure of the atmosphere
2	Plate tectonics, folding, faulting, volcanoes and earthquakes
3	Population: structure, growth, and movement
4	Water resources: Water in the world: oceans, flooding, water management
	GRADE 11
	Geographical skills and techniques: topographic maps, aerial photos, orthophoto maps, GIS
1	Global air circulation, Africa's weather and climate
2	Rocks and landforms, slopes, mass movements
3	Development: differences, issues, and opportunities
4	Resources and sustainability: soil, energy
	GRADE 12
	Geographical skills and techniques: topographic maps, GIS, synoptic weather maps
1	Climate and weather: cyclones, local climate
2	Geomorphology: drainage systems and fluvial processes
3	Rural and urban settlement
4	Economic geography of South Africa:

2.5 Overview of Geography Content in the FET Band

Term	Grade 10	Grade 11	Grade 12
1	**The atmosphere** • Composition and structure of the atmosphere • Heating of the atmosphere • Moisture in the atmosphere • Reading and interpreting synoptic weather maps **Geographical skills and techniques** • Using atlases • Fieldwork and practical work	**The atmosphere** • The Earth's energy balance • Global air circulation • Africa's weather and climate • Drought and desertification **Geographical skills and techniques** • Aerial photographs and orthophoto maps	**Climate and weather** • Mid-latitude cyclones • Tropical cyclones • Subtropical anticyclones • Valley climates • Urban climates **Geomorphology** • Drainage systems in South Africa • Fluvial processes • Catchment and river management **Geographical skills and techniques** • Mapwork techniques • Atlas work • Geographical Information Systems (GIS)
2	**Geomorphology** • The structure of the Earth • Plate tectonics • Folding and faulting • Earthquakes • Volcanoes **Geographical skills and techniques** • Using atlases • Mapwork skills • 1:50 000 topographic maps	**Geomorphology** • Topography associated with horizontally layered rocks • Topography associated with inclined/tilted rock strata • Topography associated with massive igneous rocks • Slopes • Mass movements and human responses **Geographical skills and techniques** • Map techniques • Fieldwork	**Rural settlement** • Study of settlements • Rural settlements • Rural settlement issues **Urban settlement** • Urban settlements • Urban hierarchies • Urban structure and patterns • Urban settlement issues **Geographical skills and techniques** • Geographical Information Systems (GIS) • Mapwork techniques
3	**Population** • Population distribution and density • Population structure • Population growth • Population movements • HIV and AIDS **Geographical skills and techniques** • Using atlases	**Development Geography** • The concept of development • Frameworks for development • Trade and development • Development issues and challenges • Role of development aid **Geographical skills and techniques** • Mapwork skills • Using atlases	**Economic Geography of SA** • Structure of the economy • Agriculture • Mining • Secondary and tertiary sectors • Strategies for industrial development • Informal sector **Geographical skills and techniques** • Map use and map skills • Mapwork techniques • Geographical Information Systems (GIS)

Term	Grade 10	Grade 11	Grade 12
4	**Water resources** • Water in the world • The world's oceans • Water management in South Africa • Floods **Geographical skills and techniques** • Using atlases • Geographical Information Systems (GIS)	**Resources and sustainability** • Using resources • Soil and soil erosion • Conventional energy sources and their impact on the environment • Non-conventional energy sources • Energy management in South Africa **Geographical skills and techniques** • Geographical Information Systems (GIS)	**Revision** • Climate and weather • Geomorphology • Settlement Geography • Economic Geography of SA • Geographical skills and techniques

2.6 Overview of Geography Skills and Techniques in Grades 10, 11 and 12

In every term of the FET band, Geography skills and techniques should be put into practice. The table below illustrates skills and techniques across the FET band. However, the teaching of geographical skills and techniques should be spread across all four terms, and it should be linked to specific topics in each grade.

Grade 10	Grade 11	Grade 12
Mapwork skills • Locating exact position: degrees, minutes and seconds • Scale: word, ratio and line scale • Direction: true and magnetic bearing • Distance: measuring distances and converting to ground distance along a straight line (practice)	**Mapwork skills** • Locating exact position: degrees, minutes and seconds (revision) • Relative position: direction and magnetic bearing (revision) • Distance: measuring distances and converting to ground distance along a straight line (revision) • Calculating area	**Mapwork skills** • Consolidation of map skills from Grades 10, 11 and 12 • Map and photo interpretation: includes reading and analysis of physical and constructed features • Applying map-reading skills to maps and photos
Topographic maps • South African 1:50 000 map referencing system • 1:50 000 maps: conventional signs and symbols (revision) • Navigating position using compass directions (16 points) • Direction and true bearing • Landforms and contours • Simple cross-sections	**Topographic maps** • Contours and landforms • Cross-sections on 1:50 000 maps • Vertical exaggeration • Intervisibility • Gradient	**Topographic maps** • Applying map skills and techniques: scale, contours, cross-sections, intervisibility • Direction: magnetic north, true north and magnetic declination • Gradient • Grid referencing
Aerial photographs and orthophoto maps • Photographs of landscapes • Oblique and vertical aerial photos • Orthophoto maps to be used in conjunction with 1:50 000 maps and aerial photos	**Aerial photographs and orthophoto maps** • Oblique and vertical aerial photographs: identifying landforms and features • Use of tone, texture and shadow in the interpretation of photos • Orthophoto maps: identifying features • Orienting aerial photographs and orthophoto maps with another map	**Aerial photographs and orthophoto maps** • Interpreting vertical aerial photographs • Orthophoto maps: identifying features • Comparing orthophoto map with a topographic map

Grade 10	Grade 11	Grade 12
Geographical Information Systems (GIS) • Concept of GIS • Reasons for the development of GIS • Concept of remote sensing • How remote sensing works • GIS concepts: spatial objects, lines, points, nodes and scales	**Geographical Information Systems (GIS)** • Spatially referenced data • Spatial and spectral resolution • Different types of data: line, point, area and attribute • Raster and vector data • Application of GIS to all relevant topics in the grade • Capturing different types of data from existing maps, photographs, fieldwork or other records, on tracing paper	**Geographical Information Systems (GIS)** • GIS concepts: remote sensing, resolution • Spatial and attribute data; and vector and raster data • Data standardisation, data sharing and data security • Data manipulation: data integration, buffering, querying and statistical analysis • Application of GIS by government and the private sector • Relate to all topics in Grade 12 • Develop a "paper GIS" from existing maps, photographs or other records on layers of tracing paper
Using atlases • Map reading: comparing information from different maps • Atlas index: locating physical and constructed features • Concept of map projections: equal area and true direction projections – examples, limitations and values • Four-digit grid reference (latitude and longitude, degrees and minutes) for identifying and locating features on maps	**Using atlases (revision)** • Using the index • Locating places on different maps: degrees and minutes • Comparing information from different maps	**Using atlases (revision)** • Examining thematic maps • Comparing information from different maps
Fieldwork • Using maps and other graphical representations: atlases, synoptic weather maps, temperature graphs • Collecting and recording data, using a variety of techniques: using weather instruments, collecting weather information from the media • Processing, collating, interpreting and presenting fieldwork findings: line graphs, bar graphs, maps, diagrams and synoptic weather maps	**Fieldwork** • Observation • Collecting and recording data • Processing, collating and presenting fieldwork findings	**Fieldwork** (time permitting) • Collecting and recording data using a variety of techniques • Processing, collating and presenting fieldwork findings

SECTION 3

3.1 Geography in Grade 10

Geographical skills and techniques

- Mapwork skills
- Topographic maps
- Aerial photos and orthophoto maps
- Geographical Information Systems (GIS)
- Using atlases
- Fieldwork

The atmosphere

- Composition and structure of the atmosphere
- Heating of the atmosphere
- Moisture in the atmosphere
- Reading and interpreting synoptic weather maps

Geomorphology

- The structure of the Earth
- Plate tectonics
- Folding and faulting
- Earthquakes
- Volcanoes

Population

- Population distribution and density
- Population structure
- Population growth
- Population movements
- HIV and AIDS

Water resources

- Water in the world
- The world's oceans
- Water management in South Africa
- Floods

GRADE 10 Term 1 to Term 4	FET BAND	
Topic: **Geographical Skills and Techniques** Note: a suggested breakdown of when these skills could be applied appears at the end of each topic.	**Time:** ± 24 hours Total time to be spread across the four terms	**Additional Resources:** • atlases; • orthophoto maps; • aerial photographs • GIS images; • topographic maps; and • basic weather instruments, such as a thermometer or a rain gauge.

Map Skills [2 hours]

- locating exact position: degrees, minutes and seconds; and
- scale: word, ratio, fraction and line scale.

Topographic Maps [6 hours]

- South African 1:50 000 map referencing system;
- 1:50 000 maps: conventional signs and map symbols;
- navigating to position, using compass directions (16 points);
- direction: true and magnetic bearing;
- landforms and contours eg. steep and gentle slopes, valley and conical hill;
- simple cross-sections;
- distance: measuring distance on maps and converting to ground distance, straight line and curved

Aerial Photographs and Orthophoto Maps [4 hours]

- photographs of landscapes;
- oblique and vertical aerial photos; and
- orthophoto maps to be used in conjunction with 1:50 000 maps and aerial photos..

Geographical Information Systems (GIS) [4 hours]

- concept of GIS
- reasons for the development of GIS;
- concept of remote sensing.
- how remote sensing works; and
- GIS concepts: spatial objects, lines, points, nodes and scales.

GRADE 10	FET BAND
Term 1 to Term 4	

Using Atlases [4 hours]

- kinds of maps in an atlas, namely:
  - thematic maps: world climate and vegetation regions, seasonal temperature and rainfall maps of South Africa;
  - comparing different thematic maps and cross-referencing patterns;
- concept of map projections: equal area and true direction projections – examples, limitations and values;
- map reading, analysis and interpretation;
- map reading: comparing information from different maps;
- interpreting graphs, population pyramids, photographs and models;
- atlas index: locating physical and constructed features; and
- grid references – alphanumeric and geographic (latitude and longitude, degrees and minutes) to identify and locate features on maps.

Fieldwork and Practical Work [4 hours]

- collecting and recording data, using a variety of techniques: using weather instruments and collecting weather information from the media;
- processing, collating and presenting fieldwork findings: line graphs, bar graphs, maps diagrams and synoptic weather maps; and
- using maps and other graphical representations: atlases, synoptic weather maps and temperature graphs

GRADE 10 FET BAND Term 1		
Topic: **The Atmosphere**	**Time:** ± **36 hours** (includes consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • websites such as http://www.weathersa.co.za; • weather measuring instruments; • synoptic weather maps and satellite images; • weather reports from the media; and • selected DVDs, for example An Inconvenient Truth.

GEOGRAPHICAL KNOWLEDGE

Composition and Structure of the Atmosphere [5 hours]

- importance of the atmosphere;
- the composition and structure of the atmosphere: troposphere, stratosphere, mesosphere and thermosphere;
- the ozone layer – in the stratosphere;
- causes and effects of ozone depletion; and
- ways to reduce ozone depletion.

Heating of the Atmosphere [8 hours]

- processes associated with the heating of the atmosphere: insolation, reflection, scattering, absorption, radiation, conduction and convection;
- factors that affect the temperature of different places around the world: latitude, altitude, ocean currents and distance from oceans;
- the Greenhouse Effect – impact on people and the environment;
- global warming: evidence, causes, and consequences, with reference to Africa; and
- the impact of climate and climate change on Africa's environment and people – deserts, droughts, floods and rising sea levels.

Moisture in the Atmosphere [8 hours]

- water in the atmosphere in different forms, such as water vapour and liquid;
- processes associated with evaporation, condensation and precipitation;
- the concepts of dew point, condensation level, humidity, relative humidity – factors affecting relative humidity;
- how and why clouds form;
- cloud names and associated weather conditions;
- different forms of precipitation – hail, snow, rain, dew and frost; and
- mechanisms that produce different kinds of rainfall – relief, convectional and frontal.

Reading and Interpreting Synoptic Weather Maps [6 hours]

- weather elements: temperature, dew-point temperature, cloud cover, wind direction,wind speed and atmospheric pressure;

  (note: the concept of atmospheric pressure is only introduced here; it is developed more fully in Grade 11);
- weather conditions: rain, drizzle, thunderstorms, hail and snow, as illustrated on station models; and
- reading and interpreting a selection of synoptic weather maps.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Geographical Information Systems (GIS) [1 hour]

- concept of GIS;
- reasons for the development of GIS;
- concept of remote sensing;
- how remote sensing works; and
- satellite images related to meteorology and climatology.

Fieldwork and Practical Work [4 hours]

- using maps and other graphical representations: atlases, synoptic weather maps and temperature graphs;
- collecting and recording data, using a variety of techniques – using weather instruments and collecting weather information from the media; and
- processing, collating and presenting fieldwork findings: line graphs, bar graphs, maps, diagrams and synoptic weather maps.

Using Atlases [1 hour]

- map reading – comparing information from different maps; and
- atlas index – locating physical and constructed features.

Assessment and Consolidation [3 hours]

GRADE 10 Term 2	FET BAND	
Topic: **Geomorphology**	**Time:** ± 36 hours (includes consolidation, revision, as well as formal and informal assessment)	**Additional Resources:** atlases; fieldwork; http://www.iris.edu/seismon/bigmap/index.phtml; and media information.

GEOGRAPHICAL KNOWLEDGE

The Structure of the Earth [6 hours]

- the internal structure of the Earth;
- classification of rocks: igneous, sedimentary and metamorphic;
- the rock cycle
- intrusive igneous activity and associated features: batholiths, laccoliths, monoliths, dykes, sills and pipes; and
- overview of landforms associated with igneous, sedimentary and metamorphic rocks.

Plate Tectonics [6 hours]

- changes in the position of continents over time;
- evidence for the movement of continents over time;
- plate tectonics – an explanation for the movement of continents;
- the mechanics of plate movements;
- processes and landforms associated with different kinds of plate boundaries; and
- the world's volcanic and earthquake zones.

Folding and Faulting [4 hours]

- the process of rock folding – link to plate movement;
- landforms associated with folding;
- the process of faulting – link to plate movement;
- different types of faults; and
- landforms associated with faulting, such as rift valleys and block mountains.

Earthquakes [4 hours]

- how and where earthquakes occur;
- the relationship between earthquakes and tectonic forces;
- measuring and predicting earthquakes;
- how earthquakes and tsunamis affect people and settlements – differences in vulnerability;
- strategies to reduce the impact of earthquakes; and
- case examples of the effects of selected earthquakes.

Volcanoes [4 hours]

- types of volcanoes: extrusive, intrusive, active, dormant and extinct;
- structure of volcanoes;
- impact of volcanoes on people and the environment: positive and negative; and
- case studies of different volcanic eruptions.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Mapwork Skills [2 hours]

- locating exact position: degrees, minutes and seconds; and
- scale: word, ratio, fraction and line scale.

Topographic Maps [4 hours]

- South African 1:50 000 map referencing system;
- 1: 50 000 maps: conventional signs and symbols;
- navigating position using compass directions (16 points);
- direction: true and magnetic bearing;
- landforms and contours; and
- simple cross-sections.

Aerial Photographs and Orthophoto Maps [2 hours]

- photographs of landscapes;
- oblique and vertical aerial photos; and
- orthophoto maps to be used in conjunction with 1:50 000 maps and aerial photos.

Using Atlases [2 hours]

- atlas index – locating physical and constructed features;
- four-digit grid reference (latitude and longitude, degrees and minutes) to identify and locate features on maps; and
- map projections: examples of equal area and true direction projections - critical evaluation.

Assessment and Consolidation [2 hours]

GRADE 10 Term 3	FET BAND	
Topic: **Population**	**Time:** ± 36 hours (includes consolidation, revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • demographic statistics; • related websites; and • current media information.

GEOGRAPHICAL KNOWLEDGE

Population Distribution and Density [4 hours]

- meaning of population distribution and population density;
- world population density and distribution; and
- factors that affect distribution and density of the world's population.

Population Structure [4 hours]

- population indicators: birth rates, death rates, life expectancy, fertility rate and natural increase;
- factors that influence population indicators; and
- population structure: age and sex, represented as population pyramids.

Population Growth (Using case studies from around the world is essential) [6 hours]

- world population growth over time;
- demographic transition model;
- concept of overpopulation; and
- managing population growth.

Population Movements (Using cases studies to illustrate topics below is essential)[8 hours]

- kinds of population movement: international migration, emigration, immigration;
- regional migration, rural-urban migration, urbanisation, voluntary and forced migration;
- causes and effects of population movements;
- temporary and permanent movements including: migrant labour, economic migrants, political migrants, and refugees;
- attitudes to migrants and refugees.

HIV and AIDS [4 hours]

- HIV infection rates in southern Africa;
- social and economic effects of HIV and AIDS, using specific examples from the southern African region; and
- the impact of HIV and AIDS on population structure.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Geographical Information Systems (GIS) [2 hours]

- satellite images that are related to population topics.

Atlas Skills [2 hours]

- map reading – comparing information from different maps;
- interpreting graphs, population pyramids, photographs and models

Assessment and Consolidation [6 hours]

GRADE 10	FET BAND	
Term 4		
Topic: **Water Resources**	**Time:** ± 24 hours (includes consolidation, revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • media information; websites: world water at http://www.worldwater.org/data.html; and the Department of Water Affairs http://www.dwa.gov.za/

GEOGRAPHICAL KNOWLEDGE

Water in the World [2 hours]

- different forms of water in the world: liquid, solid and gas;
- the hydrological cycle.
- occurrence of salt water and fresh water: oceans, rivers, lakes, ground water and atmosphere; and

The World's Oceans [4 hours]

- oceans as sources of oxygen, food and energy;
- ocean circulation – warm and cold currents;
- ocean currents and their importance for fishing, trade and tourism;
- relationship between oceans and people: pollution, overfishing and desalination; and
- strategies for managing the world's oceans.

Water Management in South Africa [5 hours]

- rivers, lakes and dams in South Africa;
- factors influencing the availability of water in South Africa;
- challenges of providing free basic water to rural and urban communities in South Africa;
- the role of government – initiatives towards securing water: inter-basin transfers and building dams;
- role of municipalities: provision and water purification; and
- strategies towards sustainable use of water – role of government and individuals.

Floods [4 hours]

- causes of flooding – physical and human;
- characteristics of floods – analysis and interpretation of flood hydrographs;
- managing flooding in urban, rural and informal settlement areas; and
- case study of a flood in South Africa.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Topographic Maps [2 hours]

- landforms and contours.

Aerial photographs and Orthophoto Maps [2 hours]

- photographs of landscapes;
- oblique and vertical aerial photos; and
- orthophoto maps to be used in conjunction with 1:50 000 maps and aerial photos.

Geographical Information Systems (GIS) [2 hours]

- GIS concepts: spatial objects, lines, points, nodes and scales.

Assessment and Consolidation [3 hours]

3.2 Geography in Grade 11

Geographical skills and techniques

- Mapwork skills
- Topographic maps
- Aerial photos and orthophoto maps
- Geographical Information Systems (GIS)
- Using atlases
- Fieldwork

The atmosphere

- The Earth's energy balance
- Global air circulation
- Africa's weather and climate
- Drought and desertification

Geomorphology

- Topography associated horizontal and inclined strata
- Topography associated with massive igneous rocks
- Slopes
- Mass movements and human responses

Development Geography

- The concept of development
- Frameworks for development
- Trade and development
- Development issues and challenges
- Role of development aid

Resources and sustainability

- Using resources
- Soil and soil erosion

- Conventional energy sources and their impact on the environment
- Non-conventional energy sources
- Energy management in South Africa

GRADE 11 FET BAND Term 1 – Term 4		
Topic: **Geographical Skills and Techniques** Note: a suggested breakdown of when these skills might be applied appears at the end of each topic.	**Time:** ± 24 hours Total time to be spread across the four terms	**Additional Resources:** • atlases; • orthophoto maps; • aerial photographs; • GIS images; • topographic maps, for example map sheets from previous Grade 12 examinations; and • previous examination papers.

Mapwork Skills [4 hours]

- locating exact position: degrees, minutes and seconds;
- relative position: direction and magnetic bearing;
- scale: word, ratio and line scale;
- distance: measuring distances and converting to ground distance, straight line and curved (practise); and
- calculating area: regular and irregular.

1:50 000 Topographic Maps [8 hours]

- contours and landforms;
- cross-sections on 1:50 000 topographic maps;
- vertical exaggeration;
- intervisibility; and
- gradient.

Aerial Photographs and Orthophoto Maps [4 hours]

- oblique and vertical aerial photographs – identifying landforms and features;
- use of tone, texture and shadow in the interpretation of photos;
- orthophoto maps – identifying features; and
- orienting aerial photographs and orthophoto maps with another map.

Geographical Information Systems (GIS) [4 hours]

- spatially referenced data;
- spatial and spectral resolution;
- different types of data: line, point, area and attribute;
- raster and vector data;
- application of GIS to climatology and meteorology, as well as oceanography, using satellite images; and
- capturing different types of data from existing maps, photographs, fieldwork or other records on tracing paper.

Using Atlases (revision) [2 hours]

- using the index;
- locating places on different maps, using degrees and minutes; and
- comparing information from different maps.

Fieldwork [2 hours]

- observation;
- collecting and recording data; and
- processing, collating and presenting fieldwork findings.

GRADE 11	FET BAND	
Term 1		
Topic: **The atmosphere**	**Time:** ± 36 hours (includes consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • relevant DVDs; and • media information.

GEOGRAPHICAL KNOWLEDGE

The Earth's Energy Balance [4 hours]

- the unequal heating of the atmosphere – latitudinal and seasonal;
- significance of Earth's axis and revolution around the Sun; and
- transfer of energy and energy balance – role of ocean currents and winds.

Global Air Circulation [8 hours]

- global air circulation – a response to the unequal heating of the atmosphere;
- world pressure belts;
- tri-cellular circulation: Hadley, Ferrel and polar cells;
- the relationships between air temperature, air pressure and wind;
- pressure gradient, Coriolis force and geostrophic flow;
- winds related to global air circulation: westerlies, tropical easterlies and polar easterlies;
- air mass characteristics; and
- winds related to regional and local air movements: Monsoons and Föhn.

Africa's Weather and Climate [8 hours]

- Africa's climate regions;
- subsidence and convergence – link to rainfall;
- the role of oceans in climate control in Africa;
- El Niño and La Niña processes and their effects on Africa's climate; and
- reading and interpreting synoptic weather maps.

Droughts and Desertification [8 hours]

- areas at risk: regional and local scales;
- causes of droughts;
- causes of desertification;
- effects of droughts and desertification on people and the environment, such as differences in vulnerability; and
- management strategies – case studies.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics) **Aerial Photographs and Orthophoto Maps** [4 hours] • oblique and vertical aerial photographs – identifying landforms and features; • use of tone, texture and shadow in the interpretation of photos; • orthophoto maps – identifying features; and • orienting aerial photographs and orthophoto maps with another map. **Geographical and Information Systems (GIS)** [2 hours] • satellite images; and • application of GIS to climatology and meteorology.
Assessment and Consolidation [2 hours]

GRADE 11	FET BAND	
Term 2		
Topic: **Geomorphology**	**Time**: ± 36 hours (includes consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • topographic and orthophoto maps; • (colour) pictures in printed media; and • related DVDs or videos.

GEOGRAPHICAL KNOWLEDGE

Topography Associated with Horizontally Layered Rocks: [4 hours]

- characteristics and processes associated with the development of: hilly landscapes, basaltic plateaus, canyon landscapes and Karoo landscapes (mesa, butte and conical hill);
- concept of scarp retreat or back wasting; and
- utilization of these landscapes by people.

Topography Associated with Inclined/Tilted Rock Strata: [4 hours]

- characteristics and processes associated with the development of: a scarp slope, a dip slope, a cuesta, homoclinal ridge, hogsback, cuesta basin and cuesta dome; and
- utilization of these landscapes by people.

Topography Associated with Massive Igneous Rocks: [4 hours]

- identification of batholiths, laccoliths, lopoliths, dykes and sills; and
- characteristics and processes associated with the development of granite domes and tors.

Slopes [4 hours]

- overview of South Africa's topography;
- types of slopes;
- slope elements: crest, cliff (scarp slope, free face), talus (debris, scree slope) and pediment;
- characteristics of the slope elements: crest, cliff, talus and pediment;
- slope development over time; and
- the concept of slope retreat.

Mass Movements and Human Responses [4 hours]

- concept of mass movements;
- kinds of mass movements: soil creep, soilfluction, landslides, rock falls and mud flows, and slumps;
- the impact of mass movements on people and the environment; and
- strategies to prevent or minimise the effects of mass movement – South African case studies.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Topographic Maps [6 hours]

- contours and landforms;
- cross-sections on 1:50 000 topographic maps;
- vertical exaggeration;
- intervisibility; and
- gradient.

Geographical Information Systems (GIS) [2 hours]

- spatially referenced data;
- spatial and spectral resolution;
- different types of data: line, point, area and attribute;
- raster and vector data; and
- capturing different types of data from existing maps, photographs, fieldwork or other records on tracing paper.

Fieldwork [2 hours]

- observation;
- collecting and recording data; and
- processing, collating and presenting fieldwork findings.

Assessment and Consolidation [6 hours]

GRADE 11	FET BAND	
Term 3		
Topic: **Development geography**	**Time:** ± 36 hours (includes consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • media information; • current statistical data; and • www.statssa.gov.za

GEOGRAPHICAL KNOWLEDGE

The Concept of Development [7 hours]

- terminology associated with development, such as developed, developing, more economically developed countries (MEDCs) and less economically developed countries (LEDCs), and industrialised countries;
- the concept of development: economic, social, sustainable, appropriate scale and spatial aspects;
- economic, social and demographic indicators of development: GNP, GDP, HDI Gini-coefficient, life expectancy and infant mortality; and
- examples to illustrate differences in development from local, regional, and global contexts.

Frameworks for development [6 hours]

- factors that affect development, including: access to resources, energy, history, trade imbalances, population growth, education and training, natural resource limitations and environmental degradation (note: learners need to explore the complexity and inter-related nature of these factors);
- development models: free market models, such as Rostow's model with its limitations and criticisms, core and periphery models with their application at different scales; sustainability models with their economic, social, and environmental elements; and
- community based development, including approaches to rural and urban development

  (with examples from around the world).

Trade and Development [6 hours]

- international trade and world markets: commodities traded and terms of trade;
- types of trading relationships, including: free trade, trade barriers, subsidies and fair trade;
- the concept of globalisation and its impact on development; and
- export-led development – critically examined (with examples from around the world).

Development Issues and Challenges [4 hours]

- the role of women in development: gender issues related to power, access to resources and attitudes;
- the effect of development on the environment;
- the role of the state and business in development in South Africa, including central control by the state, weak state control and public private partnerships.

Role of Development Aid [4 hours]

- concept of development aid and development co-operation;
- types of development aid – technical, conditional, humanitarian; and
- impact of aid on development (including case studies of development aid – positive and negative).

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Mapwork Skills (with reference to 1:50 000 topographic maps) [4 hours]

- locating exact position: degrees, minutes and seconds;
- relative position: direction and magnetic bearing;
- scale: word, ratio and line scale;
- Distance: measuring distances and converting to ground distance along a straight line (practice)
- calculating area.

Using Atlases (revision) [1 hour]

- using the index;
- locating places on different maps using degrees and minutes; and
- comparing information from different maps.

Assessment and Consolidation [4 hours]

GRADE 11	FET BAND	
Term 4		
Topic: **Resources and sustainability**	**Time:** ± **24 hours** (includes consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases • www.statssa.gov.za; • media information; and • South African Yearbook.

GEOGRAPHICAL KNOWLEDGE

Using Resources [3 hours]

- the relationship between resources and economic development;
- exploitation and depletion of resources; and
- concepts of sustainability and sustainable use of resources.

Soil and Soil Erosion [5 hours]

- how soils are formed;
- soil as a resource;
- causes of soil erosion: human, animal, physical, and past and present;
- evidence of soil erosion in South Africa;
- effects of soil erosion on people and the environment; and
- management strategies to prevent and control soil erosion.

Conventional Energy Sources and their Impact on the Environment [5 hours]

- maps and graphs to show thermal, hydro, and nuclear energy production in South Africa;
- thermal electricity generation using coal – outline of principles and processes;
- the impact of coal mining and thermal power stations – environmental despoliation, solid waste, waste gases and acid rain;
- case study of nuclear energy – advantages and disadvantages; and
- South Africa's potential to meet long-term energy needs using conventional sources.

Non-conventional Energy Sources [4 hours]

- solar energy – examples from South Africa and the world;
- wind energy – examples from South Africa and the world;
- future of non-conventional energy in South Africa; and
- possible effects of using more non-conventional energy on the South African economy and the environment.

Energy Management in South Africa [3 hours]

- South Africa's changing energy needs;
- energy management, towards greener economies and sustainable life styles: responsibilities of governments, businesses and individuals.

GEOGRAPHICAL SKILLS AND TECHNIQUES (applied to above topics)

Topographic Maps (applications and revision) [2 hours]

- contours and landforms;
- cross-sections on 1:50 000 maps;
- vertical exaggeration;
- intervisibility; and
- gradient.

Geographical Information Systems (GIS) [2 hours]

- spatially referenced data;
- spatial and spectral resolution;
- different types of data: line, point, area and attribute;
- raster and vector data; and
- capturing different types of data from existing maps, photographs, fieldwork or other records on tracing paper.

Assessment and Consolidation [2 hours]

3.3 Geography in Grade 12

Geographical skills and techniques

- Mapwork skills
- Topographic maps
- Aerial photos and orthophoto maps
- Geographical Information Systems (GIS)
- Using atlases

Climate and weather

- Mid-latitude cyclones
- Tropical cyclones
- Subtropical anticyclones
- Valley climates
- Urban climates

Geomorphology

- Drainage systems in South Africa
- Fluvial processes
- Catchment and river management

Rural and urban settlement

- Study of settlements
- Rural settlements
- Rural settlement issues
- Urban settlements
- Urban hierarchies
- Urban structure and growth
- Urban settlement issues

Economic Geography of South Africa

- Structure of the economy
- Agriculture
- Mining
- Secondary and tertiary sectors
- Strategies for industrial development
- Informal sector

GRADE 12 FET BAND Term 1 – Term 4		
Topic: **Geographical skills and techniques** Note: a suggested breakdown of when these skills might be applied appears at the end of each topic.	**Time:** ± 20 hours Total time to be spread across the four terms	**Additional Resources:** • atlases; • orthophoto maps; • aerial photographs; • GIS images; • topographic maps, such as map sheets from previous Grade 12 examinations; and • previous examination papers.

Mapwork Techniques (revision and application) [4 hours]

- applying map skills and techniques: scale, contours and cross-sections;
- direction: magnetic north, true north and magnetic declination;
- grid referencing;
- map and photo interpretation, including: reading and analysis of physical and constructed features; and
- using maps and other graphical representations: synoptic weather maps and temperature graphs.

Topographic Maps (revision and application) [5 hours]

- 1: 50 000 maps: conventional signs and symbols;
- contours and landforms;
- cross-sections on 1:50 000 maps;
- vertical exaggeration;
- intervisibility; and
- gradient.

Aerial Photographs and Orthophoto Maps [4 hours]

- interpreting vertical aerial photographs;
- orthophoto maps – identifying features; and
- comparing an orthophoto map with a topographic map.

Geographical Information Systems (GIS) [6 hours]

- examination of a selection of satellite images;
- GIS concepts: remote sensing and resolution;
- spatial and attribute data; vector and raster data;
- data standardisation, data sharing and data security;
- data manipulation: data integration, buffering, querying and statistical analysis;
- application of GIS techniques to a range of topics covered in Grade 12; and
- developing a “paper GIS” from existing maps, photographs or other records on tracing paper.

Using Atlases (revision and application) [1 hour]

- examining thematic maps; and
- comparing information from different maps.

GRADE 12	FET BAND	
Term 1		
Topic: **Climate and weather** (regional and local weather systems)	**Time**: **± 14 + 5 hours** (includes consolidation, mapwork and revision as well as formal and informal assessment)	**Additional Resources:** • atlases; • media information; • http://www.weathersa.co.za for weather prediction, satellite images and synoptic weather charts; and • http://www.weathersa.co.za

GEOGRAPHICAL KNOWLEDGE

Mid-latitude Cyclones [3 hours]

- general characteristics;
- areas where mid-latitude cyclones form;
- conditions necessary for their formation;
- stages of development and related weather conditions;
- weather patterns associated with cold, warm, and occluded fronts; and
- reading and interpreting satellite images and synoptic weather maps.

Tropical Cyclones [4 hours]

- general characteristics;
- areas where tropical cyclones form;
- factors necessary for their formation;
- stages of development;
- associated weather patterns;
- reading and interpreting satellite images and synoptic weather maps;
- case study of one recent tropical cyclone that affected southern Africa;
- impact of tropical cyclones on human activities and the environment; and
- strategies that help to prepare for and manage the effects of tropical cyclones.

Subtropical Anticyclones and Associated Weather Conditions [3 hours]

- location of the high-pressure cells that affect South Africa;
- general characteristics of these high-pressure cells;
- anticyclonic air circulation around South Africa, and its influence on weather and climate;
- travelling disturbances associated with anticyclonic circulation: moisture front, line thunderstorms, coastal low pressure systems and South African berg winds; and
- reading and interpreting satellite images and synoptic weather maps that illustrate weather associated with subtropical anticyclonic conditions.

Valley Climates [2 hours]

- the micro-climate of valleys (the effect of the slope aspect);
- development of anabatic and katabatic winds, inversions, frost pockets and radiation fog; and
- the influence of local climates on human activities such as settlement and farming.

Urban Climates [2 hours]

- reasons for differences between rural and urban climates;
- urban heat islands – causes and effects;
- concept of pollution domes – causes and effects; and
- strategies to reduce the heat island effect.

GRADE 12	FET BAND	
Term 1		
Topic: **Geomorphology**	**Time:** **± 12 + 5 hours** (includes mapwork, consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • http://ga.water.usgs.gov/edu/watercycle.html; • information about SA rivers: http://www.dwaf.gov.za; • http://www.uwsp.edu/geo/faculty/ritter/geog101/ textbook/ fluvial systems/drainage_patterns.html; • http://www.slideshare.net/migratorycoconut/chapter-81-mass-movements; • rivers in local environment (fieldwork) and GIS, related to catchment areas.

Drainage Systems in South Africa [5 hours]

- important concepts: drainage basin, catchment area, river system, watershed, tributary, river mouth, source, confluence, water table, surface run-off and groundwater;
- types of rivers: permanent, periodic, episodic and exotic;
- drainage patterns: dendritic, trellis, rectangular, radial, centripetal, deranged and parallel;
- drainage density;
- use of topographic maps to identify stream order and density; and
- discharge of a river: laminar and turbulent flow.

Fluvial Processes [4 hours]

- river profiles: transverse profile, longitudinal profile and their relationship to different stages of a river:
- identification and description of fluvial landforms: meanders, oxbow lakes, braided streams, floodplain, natural leveé, waterfall, rapids and delta;
- river grading;
- rejuvenation of rivers: reasons and resultant features, such as knick point, terraces and incised meanders;
- river capture (stream piracy): the concepts of abstraction and river capture; features associated with river capture (captor stream, captured stream, misfit stream, elbow of capture, wind gap); and
- superimposed and antecedent drainage patterns.

Catchment and River Management [3 hours]

- importance of managing drainage basins and catchment areas;
- impact of people on drainage basins and catchment areas; and
- case study of one catchment area management strategy in South Africa.

GEOGRAPHICAL SKILLS AND TECHNIQUES (application to climatology and geomorphology)

Mapwork Techniques [2 hours]

- Reading and interpreting synoptic weather maps, satellite images and other weather and climate related data;
- map and photo interpretation – includes reading and analysis of physical and constructed features; and
- applying map-reading skills to maps and photos.

Topographic Maps [2 hours]

- contours and landforms;
- cross sections;
- direction: magnetic north, true north and magnetic declination;
- gradient;
- intervisibility; and
- grid referencing.

Aerial Photographs and Orthophoto Maps [2 hours]

- interpreting vertical aerial photographs;
- orthophoto maps – identifying features; and
- comparing an orthophoto map with a topographic map.

Geographical Information Systems (GIS) [1 hour]

- examination of GIS information for different catchment areas; and
- developing a “paper GIS” from existing maps, photographs or other records on tracing paper.

Assessment and Consolidation [3 hours]

GRADE 12 Term 2	FET BAND	
Topic: **Rural Settlement and Urban Settlement**	**Time:** ± **36 hours** (includes mapwork, consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases; • media information; • http://www.statssa.gov.za; • topographic and orthophoto maps; • vertical photographs or satellite images (such as Google Earth); and • telephone directory for types of economic activities in a settlement.

Study of Settlements [3 hours]

- concept of settlement;
- site and situation;
- rural and urban settlements; and
- settlement classification according to size, complexity, pattern and function.

Rural Settlements [5 hours]

- how site and situation affect the location of rural settlements;
- classification of rural settlements according to pattern and function;
- reasons for different shapes of settlements: round, linear, T-shaped and cross-road; and
- land use in rural settlements.

Rural Settlement Issues [6 hours]

- rural-urban migration;
- causes and consequences of rural depopulation on people and the economy;
- case study that illustrates effects of rural depopulation and strategies to address them; and
- social justice issues in rural areas, such as access to resources and land reform.

Urban Settlements [4 hours]

- the origin and development of urban settlements – urbanisation of the world's population;
- how site and situation affect the location of urban settlements; and
- classification of urban settlements according to function, such as central places, trade and transport, break of bulk points, specialised cities, junction towns and gateway towns or gap towns.

Urban Hierarchies [2 hours]

- the concepts of urban hierarchy, central place, threshold population, sphere of influence and range of goods;
- lower and higher order functions and services; and
- lower and higher order centres.

Urban Structure and Patterns [4 hours]

- internal structure and patterns of urban settlements: land use zones; concept of urban profile; and factors influencing the morphological structure of a city;
- models of urban structure, such as multiple-nuclei model, the modern American-western city, the Third World city and the South African city; and
- changing urban patterns and land use in South African cities.

Urban Settlement Issues [5 hours]

- recent urbanisation patterns in South Africa;
- urban issues related to rapid urbanisation: lack of planning, housing shortage, overcrowding, traffic congestion and problems with service provision;
- the growth of informal settlements and associated issues: case studies from the world and South Africa; and
- case studies that show how selected urban areas in South Africa are managing urban challenges, handling environmental, economic, and social justice concerns.

GEOGRAPHICAL SKILLS AND TECHNIQUES (application to above topics)

Mapwork Skills [3 hours]

- applying map skills and techniques: scale, contours and cross-sections; and
- map and photo interpretation: including reading and analysis of physical and constructed features.

Geographical Information Systems (GIS) [2 hours]

- GIS concepts: remote-sensing and resolution;
- spatial and attribute data; vector and raster data;
- data standardisation, data sharing and data security;
- data manipulation: data integration, buffering, querying and statistical analysis;

  application of GIS by government and the private sector, relate to weather and settlement topics above;
- developing a “paper GIS” from existing maps, photographs or other records on layers of tracing paper.

Assessment and Consolidation [2 hours]

GRADE 12 Term 3	FET BAND	
Topic: **Economic Geography of South Africa**	**Time**: **± 36 hours** (includes map work, consolidation and revision, as well as formal and informal assessment)	**Additional Resources:** • atlases, topographic maps, aerial photos and media information; • satellite images; • http://www.statssa.gov.za; • food security: http://www.fanrpan.org; and • information on Maputo Corridor: http://www.mcli.co.za/mcli-web/mdc.sdi.hmt.

Structure of the Economy [3 hours]

- economic sectors (primary, secondary, tertiary and quaternary);
- economic sectors' contribution to the South African economy: value and employment; and
- use of statistical and graphical information.

Agriculture [5 hours]

- contribution of agriculture to the South African economy;
- the role of small-scale farmers and large-scale farmers;
- main products produced: home market and export market;
- factors that favour and hinder agriculture in South Africa, such as climate, soil, land ownership and trade;
- the importance of food security in South Africa – influencing factors; and
- case studies related to food security in South Africa.

Mining [5 hours]

- contribution of mining to the South African economy;
- significance of mining to the development of South Africa;
- factors that favour and hinder mining in South Africa; and
- a case study of one of South Africa's main minerals in relation to the above points.

Secondary and Tertiary Sectors [6 hours]

- contribution of secondary and tertiary sectors to the South African economy;
- types of industries, such as heavy, light, raw material orientated, market orientated, footloose industries, ubiquitous industries and bridge (break of bulk point) industries;
- factors influencing industrial development in South Africa, such as raw materials, labour supply, transport infrastructure, political intervention, competition and trade; and
- South Africa's industrial regions
  - Gauteng (PWV), Durban-Pinetown, Port Elizabeth-Uitenhage, South-western Cape
  - factors influencing their location
  - main industrial activities.

  (Case studies from South Africa to illustrate the above)

Strategies for Industrial Development [3 hours]

- overview of apartheid and post-apartheid industrial development strategies;
- concept and distribution of Industrial Development Zones (IDZs);
- case studies of two Spatial Development Initiatives (SDIs); and
- issues associated with industrial centralisation and decentralisation.

Informal Sector [4 hours]

- concept and characteristics of informal sector employment;
- reasons for high informal sector employment in South Africa;
- challenges facing South Africa's informal sector

(Case studies to illustrate the above in the South African context)

GEOGRAPHICAL SKILLS AND TECHNIQUES (application to above topics)

Mapwork Skills [2 hours]

- consolidation of map skills from Grades 10, 11 and 12;
- map and photo interpretation – includes reading and analysis of physical and constructed features; and
- applying map-reading skills to maps and photos.

Topographic Maps [2 hours]

- applying map skills and techniques: scale, contours and cross-sections; and
- grid referencing.

Geographical Information Systems (GIS) [2 hours]

- examination of a selection of satellite images;
- GIS concepts: remote sensing and resolution;
- spatial and attribute data; vector and raster data;
- data standardisation, data sharing and data security;
- data manipulation: data integration, buffering, querying and statistical analysis; and
- developing a "paper GIS" from existing maps, photographs or other records on tracing paper.

Using Atlases (revision) [1 hour]

- examining thematic maps; and
- comparing information from different maps.

Assessment and Consolidation [3 hours]

GRADE 12	**FET BAND**
Term 4	

Revision

- Climate and weather; [3 hours]
- Geomorphology; [3 hours]
- Settlement Geography (rural and urban); [3 hours]
- Economic Geography of South Africa; and [3 hours]
- Geographical skills and techniques. [3 hours]

SECTION 4

ASSESSMENT GUIDELINES

4.1 Introduction

Assessment is a continuous, planned process of identifying, gathering and interpreting information about the performance of learners, and may take various forms. It involves four steps: generating and collecting evidence of achievement; evaluating this evidence; recording the findings; and using this information. The information is particularly used to understand and thereby assist the learner's development in order to improve the process of learning and teaching.

Assessment is integral to teaching and learning because it informs teachers about learners' specific needs. Assessment provides teachers with feedback that allows them to adjust their teaching strategies. It also provides learners with feedback, allowing them to monitor their own achievement. "Assessment for learning" takes note of learners' needs, and is developmental. It helps learners to improve and progress by informing them of their strengths and weaknesses. When the focus of assessment is on the results of learning, assessment is referred to as "assessment of learning". Assessment of learning usually takes place at the end of a period of work, such as a topic, term or year. Assessment of learning is typically used for promotion and certification purposes. Both assessment for learning and assessment of learning strategies should be used during the school year.

4.2 Informal or Daily Assessment

The purpose of assessment for learning is to continuously collect information on a learner's achievement. This information can be used to improve their learning.

Informal assessment is a daily monitoring of learners' progress. This type of assessment is done, for example, through observations, in discussions, during practical demonstrations, in learner-teacher conferences and in informal classroom interactions. Informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how their learning is progressing. Thereby, feedback is provided to the learners. Informal assessment informs planning for teaching, but need not be recorded. It should not be seen as separate from the learning activities that take place in the classroom. Learners or teachers can mark these assessment tasks.

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

4.3 Formal Assessment

All assessment tasks that make up a formal programme of assessment for the year are regarded as formal assessment. Teachers should mark and record formal assessment tasks for progression and certification purposes. All formal assessment tasks are subject to moderation. This assures quality. Thereby, appropriate standards can be maintained.

Formal assessment provides teachers with a systematic way of evaluating how well learners are progressing in a grade and in a particular subject. Examples of formal assessments include tests, examinations, practical tasks,

mapwork skills tasks, tasks that use a variety of data and information, research tasks, fieldwork tasks, projects, oral presentations, demonstrations and performances. The preferred types of tasks in different grades may be indicated by the national and provincial education departments or examination bodies.

4.3.1 Summary of formal assessments expected in Grades 10 to 12

Grade	Formal Assessments	CASS (25%)	Final Exam (75%)	Total
10	• 3 Assessment tasks • 2 tests • Mid-year examination	3 x 20 = 60 2 x 10 = 20 1 x 20 = 20 **100**		**400**
	• End-of-year examination		Paper 1 = 225 (3 x 75) Paper 2 = 75 **300**	
11	• 3 Assessment tasks • 2 tests • Mid-year examination	3 x 20 = 60 2 x 10 = 20 1 x 20 = 20 **100**		**400**
	• End-of-year examination		Paper 1 = 225 (3 x 75) Paper 2 = 75 **300**	
12	• 3 Assessment tasks • 2 tests • Mid-year examination • Trial examination	3 x 20 = 60 2 x 10 = 20 1 x 10 = 10 1 x 10 = 10 **100**		**400**
	• End-of-year examination		Paper 1 = 225 (3 x 75) Paper 2 = 75 **300**	

The Programme of Assessment for Geography in Grades 10 and 11 comprises seven tasks which are internally assessed. The six tasks completed during the school year make up 25% of the total mark for Geography, while the end-of-year examination is the seventh task and makes up the remaining 75%.

In Grade 12, assessment consists of two components: a Programme of Assessment which makes up 25% of the total mark for Geography and an external examination which makes up the remaining 75%. The formal assessment tasks consist of seven tasks which are internally assessed. The external examination is externally set and moderated.

4.3.2 Formal assessment requirements for Geography

(a) Assessment Tasks

Assessment tasks should cover the geographical content and concepts highlighted in the curriculum. Some examples of geographical competencies that may be assessed in the formal assessment tasks are listed below. These geographical competencies may form the focus of specific tasks or they may be used together as part of a task. Learners should demonstrate competence in various combinations of the following during the grade:

- reading, analysing and interpreting maps, photographs and satellite images;
- drawing, analysing and interpreting graphs;
- drawing and labelling sketch maps;
- labelling diagrams;
- using models;
- working with a variety of data;
- analysing and synthesising information from different sources;
- conducting fieldwork, recording and interpreting findings
- working with concepts, data, procedures related to GIS;
- conducting and writing up research;
- writing paragraphs and essays; and
- evaluating arguments and expressing and supporting a point of view.

Geographical skills and techniques should be integrated into all formal assessment tasks. However, **one** formal asessment task in each grade should focus primarily on skills and techniques associated with topographic maps and orthophoto maps.

Points to consider when designing assessment tasks:

- The purpose of the assessment tasks is to assess the learner's ability to apply in an integrated way, knowledge, skills and a range of competencies.
- It is helpful to design assessment tasks around specific issues in familiar or unfamiliar contexts to enhance the interest and enthusiasm of learners.
- The criteria for assessing each task should be discussed and negotiated with the learners preferably before they start the task.

Formal assessements must cater for a range of cognitive levels and abilities of learners as shown in the table below

Table 1: suggested weighting of cognitive levels in the FET band

GRADE	Lower order (Knowledge/ Remembering)	Middle order (Understanding, Applying)	Higher order (Analysing, Evaluating, Creating)
10	40%	40%	20%
11	30%	50%	20%
12	25%	50%	25%

(b) Tests

A test should be between 40 and 60 minutes long. A test should also cover a significant amount of content and skills, such as a section of work that covers about four to six weeks. Tests may include a variety of assessment styles, such as multiple choice questions, one line answers, written paragraphs, labeling diagrams, doing calculations and working with data.

Tests (including other formal assessment tasks) should cater for a range of cognitive levels as indicated above.

(c) Examinations

The Geography examination in Grade 10, 11, 12 shall comprise of TWO papers; Paper 1 (Theory) and Paper 2 (Mapwork). These papers should cater for a range of cognitive levels outlined in table 1. The outline of the structure of the mid-year, trial examination (Grade 12 only) and end-of-year examinations is provided in annexure 4.7.1.

4.4 Programme of Assessment

The programme of assessment is designed to spread formal assessment tasks over all subjects in a school. In Grades 10 and 11, the year mark is derived from tasks, tests and the mid-year examination. For promotion purposes, the year mark is added to the end-of-year examination mark (refer to tables on the next page).

The total mark for each grade in FET is weighted as follows:

- year mark 25%; and
- fourth term examination 75%.

4.4.1 Programme of Assessment in Grades 10-12

Grades 10 - 11

Term	Assessment	Description of assessment	Marks
1	1	Data-handling task	20
	2	Test	10
2	3	Mapwork task	20
	4	Mid-year examination (Paper 1 and Paper 2)	20
3	5	Research/Essay writing task	20
	6	Test	10
		Year Mark	**100**

4	7	End-of-year examination (Paper 1 and Paper 2)	300
		Total Assessment	**400**
		Percentage	100%

Grade 12

Term	Assessment	Description of assessment	Marks
1	1	Data-handling task	20
	2	Test	10
2	3	Mapwork task	20
	4	Mid-year examination (Paper 1 and Paper 2)	10
3	5	Research/Essay writing task	20
	6	Test	10
	7	Trial examination (Paper 1 and Paper 2)	10
		Year Mark	**100**

4		End-of-year examination (Paper 1 and Paper 2)	300
		Total Assessment	**400**
		Percentage	100%

4.4.2 Examples of possible assessment activities

Type of task	Assessment options or combination of options (see 4.3.2a)
Assessment 1 **Data-handling task**	• Analysing and synthesising information from different sources • Drawing, analysing and interpreting graphs • Using and analysing case studies • Labelling diagrams and describing the illustrated process or feature • Reading and interpreting maps, synoptic weather maps, satellite images • Conducting field work, recording and interpreting findings
Assessment 2 **Mapwork task**	• Reading, analysing and interpreting topographical and orthophoto maps • Reading, analysing and interpreting different types of photographs • Reading and interpreting sketch maps • Conducting field work, recording and interpreting findings • Making sketches of features or patterns and write paragraphs or essays about it • Applying a variety of relevant GIS techniques
Assessment 3 **Research/Essay writing task**	• Analysing and synthesising information from different sources • Conducting field work, recording and interpreting findings • Using and analysing case studies • Applying a variety of relevant GIS techniques • Evaluating arguments, expressing and/or supporting or disagreeing with a point of view with substantiation

4.5 Recording and Reporting

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

Reporting is a process of communicating learner performance to learners, parents, schools and other stakeholders. Learner performance can be reported in a number of ways, including report cards, parents' meetings, school visitation days, parent-teacher conferences, phone calls, letters, class or school newsletters. Teachers in all grades use percentages, although seven levels of competence exist for all subjects from Grade R to Grade 12. The various achievement levels and their corresponding percentage bands are shown in the table that follows.

Codes and percentages for recording and reporting

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

Note: The seven-point scale should have clear descriptors that give detailed information for each level. Teachers will record actual marks against the task by using a record sheet; and they will report percentages against the subject on the learners' report cards.

4.6 Moderation of Assessment

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

In Grades 10 and 11, all assessment is internal. In Grade 12, the end-of-the year assessment (75%) is externally set, marked and moderated.

4.7 Annexure

4.7.1 Format of examinations in Grades 10-12

Grade 10 Examination Outline

	PAPER 1	PAPER 2
Mid-year	**Marks:140** **Time: 2 hours** Learners must answer **all** questions **Question 1** • Short objective type questions for 10 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 30 marks • Geomorphology for 30 marks **Question 2** • Short objective type questions for 10 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 30 marks • Geomorphology for 30 marks	**Marks: 60** **Time: 1½ hours** **Question 1** Multiple choice questions (10 marks) **Question 2** Map calculations (20 marks) **Question 3** Analysis and interpretation of a topographic map and a photograph, and application of theory (20 marks) **Question 4** GIS (10 marks)
End-of-year	**Marks: 225** **Time: 3 hours** Learners must answer **any three** questions. **Section A:** **Question 1** • Short objective type questions for 15 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 30 marks • Geomorphology for 30 marks **Question 2** • Short objective type questions for 15 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 30 marks • Geomorphology for 30 marks **Section B:** **Question 3** • Short objective type questions for 15 marks to cover content on Population and Water resources. • Population for 30 marks • Water resources for 30 marks **Question 4** • Short objective type questions for 15 marks to cover content on Population and Water resources. • Population for 30 marks • Water resources for 30 marks	**Marks: 75** **Time: 1½ hours** **Question 1** Multiple choice questions (15 marks) **Question 2** Map calculations (20 marks) **Question 3** Analysis and interpretation of a topographic map and a photograph, and application of theory (25 marks) **Question 4** GIS (15 marks)

Grade 11 Examination Outline

	PAPER 1	PAPER 2
Mid-year	**Marks: 225** **Time: 3 hours** Learners must answer **all** questions **Question 1** • Short objective type questions for 15 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 50 marks • Geomorphology for 50 marks **Question 2** • Short objective type questions for 10 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 50 marks • Geomorphology for 50 marks	**Marks: 75** **Time: 1½ hours** **Question 1** Multiple choice questions (15 marks) **Question 2** Map calculations (20 marks) **Question 3** Analysis and interpretation of a topographic map and a photograph, and application of theory (25 marks) **Question 4** GIS (15 marks)
End-of-year	**Marks: 225** **Time: 3 hours** Learners must answer **any three** questions. **Section A:** **Question 1** • Short objective type questions for 15 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 30 marks • Geomorphology for 30 marks **Question 2** • Short objective type questions for 15 marks to cover content on the Atmosphere and Geomorphology. • Atmosphere for 30 marks • Geomorphology for 30 marks **Section B:** **Question 3** • Short objective type questions for 15 marks to cover content on Development and Resources and sustainability. • Development for 30 marks • Resources and sustainability for 30 marks **Question 4** • Short objective type questions for 15 marks to cover content on Development and Resources and sustainability. • Development for 30 marks • Resources and sustainability for 30 marks	**Marks: 75** **Time: 1½ hours** **Question 1** Multiple choice questions (15 marks) **Question 2** Map calculations (20 marks) **Question 3** Analysis and interpretation of a topographic map and a photograph, and application of theory (25 marks) **Question 4** GIS (15 marks)

Grade 12 Examination Outline

	PAPER 1	PAPER 2
Mid-year	**Marks: 225** **Time: 3 hours** Learners must answer **all three** questions. **Section A:** **Question 1** • Short objective type questions for 15 marks to cover content on Climate and weather and Geomorphology. • Climate and weather for 30 marks • Geomorphology for 30 marks **Question 2** • Short objective type questions for 15 marks to cover content on Climate and weather and Geomorphology. • Climate and weather for 30 marks • Geomorphology for 30 marks **Section B:** **Question 3** • Short objective type questions for 15 marks to cover content on Rural and Urban settlement. • Rural settlement for 30 marks • Urban settlement for 30 marks	**Marks: 75** **Time: 1½ hours** **Question 1** Multiple choice questions (15 marks) **Question 2** Map calculations (20 marks) **Question 3** Analysis and interpretation of a topographic map and a photograph, and application of theory (25 marks) **Question 4** GIS (15 marks)
Trial and End-of-year	**Marks: 225** **Time: 3 hours** Learners must answer **any three** questions. **Section A:** **Question 1** • Short objective type questions for 15 marks to cover content on Climate and weather and Geomorphology. • Climate and weather for 30 marks • Geomorphology for 30 marks **Question 2** • Short objective type questions for 15 marks to cover content on Climate and weather and Geomorphology. • Climate and weather for 30 marks • Geomorphology for 30 marks **Section B:** **Question 3** • Short objective type questions for 15 marks to cover content on Settlement and Economic Geography. • Settlement Geography for 30 marks • Economic Geography for 30 marks **Question 4** • Short objective type questions for 15 marks to cover content on Settlement and Economic Geography. • Settlement Geography for 30 marks • Economic Geography for 30 marks	**Marks: 75** **Time: 1½ hours** **Question 1** Multiple choice questions (15 marks) **Question 2** Map calculations (20 marks) **Question 3** Analysis and interpretation of a topographic map and a photograph, and application of theory (25 marks) **Question 4** GIS (15 marks)

4.7.2 Assessment in Geography – some points to consider

Assessment in Geography should be guided by:

- knowing and understanding geographically;
- working with data (from a variety of sources); and
- making judgements and decisions.

Knowing and understanding geographically

Learners should be able to demonstrate knowledge and understanding of:

(a) the wide range of physical and human processes that contribute to the development of:

- physical, economic, social, political and cultural environments; and
- spatial patterns and spatial interactions.

(b) the inter-relationships between people's activities and the total environment and an ability to seek and offer explanations for them;

(c) the importance of scale (personal, local, provincial, national, continental and global) and how spatial distributions and working systems interact; and

(d) the changes that occur through time in places, landscapes and spatial distribution.

Working with data (from a variety of sources)

Learners should be able to:

(a) ask questions, observe, collect, organise (classify), analyse, synthesise (interpret) and present geographical data;

(b) use and apply Geographical skills and techniques in reading, analysing and interpreting information and data in various forms (verbal, numerical, diagrammatic, pictorial, graphical and digital);

(c) depict information in simple map, diagrammatic and digital forms; and

(d) use geographical data to recognise spatial patterns and interactions.

Making judgements and decisions

Learners should be able to:

(a) reason, make judgements (including evaluating and drawing conclusions) that demonstrate, where appropriate:

- sensitivity to, and a concern for, the environment and the need for sustainable development;
- an aesthetic appreciation of the Earth, including its people, their activities, places, landscapes, natural processes and phenomena;

- an appreciation of the attitudes, values, beliefs and indigenous knowledge systems of others in cultural, economic, environmental, political and social issues that have a geographical dimension;
- an awareness of the contrasting opportunities and constraints of people living in different places and under different physical and human conditions; and
- a willingness to review their own attitudes in the light of new knowledge and experiences; and

(b) recognise the role of decision-making within:

- the physical and human geographical contexts;
- the values and perceptions of groups and individuals;
- the constraints and choices available to decision-makers; and
- the increasing level of global dependence and inter-dependence.

4.8 General

This document should be read in conjunction with:

4.8.1 National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12; and

4.8.2 The policy document, National Protocol for Assessment Grades R – 12.

4.8.3 Subject specific exam guidelines as contained in the draft policy document: National policy pertaining to the programme and promotion requirements of the National Curriculum Statement, Grades R – 12.