



education

Department of Education
REPUBLIC OF SOUTH AFRICA

NATIONAL CURRICULUM STATEMENT GRADES 10-12

**SUBJECT:
COMPUTER APPLICATIONS
TECHNOLOGY**

**TEACHER TRAINING MANUAL
2006**

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PROGRAMME

PERIOD: Monday to Friday

DURATION: 36-37 hours

5-DAY PROGRAMME FOR TEACHERS-

| SESSION | ACTIVITY | TIME / session | Time / activity | DAY |
|--|--|----------------|------------------|-----------------|
| 1. Introducing the National Curriculum Statement (NCS) and the National Senior Certificate (NSC) | Activity 1: Introduction of training participants | 3-4 hours | 1 Hour | Mon AM |
| | Activity 2: Overview of the week of training / documents provided | | 1 Hour | |
| | Activity 3: Introduction to the NCS and NSC <ul style="list-style-type: none"> ▪ Part 1 – 20 Questions ▪ Part 2 – NCS & NSC ▪ Part 3 – Requirements for HE Study | | 2 Hours | |
| 2. Introducing the Subject Statement | Activity 1 Introduction | 20 hours | Intro – 1 Hour | Mon PM – Wed PM |
| | Activity 2 Subject Content and Approach <ul style="list-style-type: none"> ▪ Part 1 – LO 1 ▪ Part 2 – LO 2 ▪ Part 3 – LO 3 ▪ Part 4 – Integration across the Los ▪ Part 5 – Practical Assessment Task | | Part 1 – 4 Hours | |
| | | | Part 2 – 4 Hours | |
| | | | Part 3 – 3 Hours | |
| | | | Part 4 – 3 Hours | |
| | | | Part 5 – 4 Hours | |
| Activity 3 Conclusion / Wrap-up | Wrap Up 1 Hour | | | |
| 3. Planning for teaching subjects in the NCS | Activity 1 The Planning Cycle | 8 hours | ½ Hour | Thu |
| | Activity 2 The Grade 11 Work Schedule | | 1 Hour | |
| | Activity 3 Critique of the Grade 11 Work Schedule | | 3 ½ Hours | |
| | Activity 4 Development of the first Lesson Plan for Grade 11 | | 2 Hours | |
| | Activity 5 Report Back & Wrap Up | | 1 Hour | |
| 4. Annual assessment plan | Activity 1 Introduction | 5 hours | ½ Hour | Fri AM |
| | Activity 2 Programme of Assessment for Grades 10 - 12 | | 2 Hours | |
| | Activity 3 Development of Grade 11 Annual Assessment Plan. | | 2 ½ Hours | |

SESSION 1 –

Introducing the National Curriculum Statement (NCS) and the National Senior Certificate (NSC) (3-4 hours)

ACTIVITY 1: Introduction of training participants

FORM OF ACTIVITY: [Introductions](#)

ACTIVITY 2: Overview of the week of training / documents provided

FORM OF ACTIVITY: Presentation

RESOURCES: The 5-day training programme (PowerPoint)
A hard copy of each document referred to-

- National Senior Certificate Policy
- Subject Statement
- Subject Assessment Guidelines
- Learning Programme Guidelines
- National Protocol on Assessment
- Higher Education admission requirements

CONTENT:

- Training programme for the week and house rules
- Documents making up the National Curriculum Statement policy and documents supporting the National Curriculum Statement policy – purpose and status of each

ACTIVITY 3: Introduction to the NCS and NSC

Part 1: 20 Questions

FORM OF ACTIVITY: Test and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, [Appendix 1](#)

CONTENT:

- 20 questions focusing on the NCS and NSC

INSTRUCTIONS:

- Make use of Appendix 1 and follow the instructions.
 - Allow the participants to record their responses to each question as individuals
- Discuss the answers with the group as a whole, inviting participants to offer answers before discussing them

Go to:

| | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

Part 2: NCS and NSC

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, a hard copy of each document referred to in the presentation-

- National Senior Certificate Policy
- Subject Statement
- Subject Assessment Guidelines
- Learning Programme Guidelines
- National Protocol on Assessment

CONTENT:

- Overview of the NCS, including principles and Critical and Developmental Outcomes
- National Senior Certificate: Requirements, structure and details

Part 3: Requirements for Higher Education study

FORM OF ACTIVITY: Open-book and presentation

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, Higher Education Admission Requirements (Page 6), [Appendix 1](#)

CONTENT:

- Requirements for certificate, diploma and degree programmes

INSTRUCTIONS:

Introduction

- While the Higher Education document is not part of NCS policy, it provides teachers with indicators on required learner performance in NCS subjects for entry into Higher Education
- The 3-year NSC programme is the key to Higher Education study and teachers need to be aware of the admission requirements for different programmes offered at Higher Education Institutions

Open-book activity

- Ask participants to study the Higher Education document and identify the requirements for certificate, diploma and degree programmes
- Make use of Appendix 1 to fill in the requirements for each course.

Report back and discussion

- Allow one report back
- Present the requirements (see PowerPoint Presentation)
- Discuss the designated list of subjects, noting that learners already have 3 of the designated subjects in their NSC package – two languages and Mathematics or Mathematical Literacy

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

SESSION 2 – Introducing the Subject Statement (20 hours)

ACTIVITY 1: Introduction to COMPUTER APPLICATIONS TECHNOLOGY (1 hour)

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, Subject Statement (Page 9), LPG & SAG

CONTENT:

- Overview of the subject: Definition, purpose and scope of the subject – its origin
- Learning Outcomes for the subject – briefly refer to relationship with the Critical and Developmental Outcomes and the NCS principles
- Brief overview of subject developments, i.e. new content (Report 550 to National Curriculum Statement)
- Point out how the Assessment Standards for COMPUTER APPLICATIONS TECHNOLOGY give an indication of the teaching, learning and assessment approach to be used in the classroom – for example the verbs and the nouns contained in each Assessment Standard give a general indication of the skills and knowledge to be displayed by learners when engaging in an activity related to that Assessment Standard
- Mention of supporting policies relevant to the subject and how they support the implementation of the subject COMPUTER APPLICATIONS TECHNOLOGY (do not engage in them)
- Time allocation and placement of COMPUTER APPLICATIONS TECHNOLOGY in the school timetable

ACTIVITY 2: COMPUTER APPLICATIONS TECHNOLOGY Subject Content, Approach and Progression (18 hours)

NOTE:

Each Learning Outcome for COMPUTER APPLICATIONS TECHNOLOGY will be dealt with individually, addressing the subject content, the subject approach and the progression. A separate activity that includes looking at integration within and across the Learning Outcomes will be done at a later stage. This principle will then be cemented in through an in depth look at Scenarios.

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

Part 1: LO1 (4 hours)

FORM OF ACTIVITY: Presentation, interactive, report back and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, Subject Statement (Pg 14 – 28), Learning Programme Guidelines (Page 22), [Appendix 2](#), [Appendix 3](#)

CONTENT:

- Content, progression, integration and approach to teaching, learning and assessment

INSTRUCTIONS:

- Participants engage in [20 Questions](#) about CAT.
- Divide into groups and complete the following activity
 - Do a critical study of the Grade 10-12 subject content for the LO
 - What content is to be taught per grade for the Learning Outcome
 - Complete [Appendix 2](#)
 - Every group member should fill in their own worksheet as they will need it later on.
- Report Back By Groups
- Individual Activity
 - Peruse through the completed Appendix 2.
 - Note the content that is new to you.
 - Using [Appendix 3](#), list possible strategies you could implement in your personal growth plan to address these challenges.
 - List strategies the department could implement to improve your service delivery.
- Broad Discussion on possible challenges educators may encounter and may want to share.

Report Back

One group reports back and others make additions to avoid long, extended reporting so that any remaining time can be used to engage in a constructive discussion.

Go to:

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|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

Part 2: LO2 (4 hours)

Repeat the same format as used for Part 1: LO1.

Instructions:

- Jig Saw method-
 - Group participants into the home group.
 - Give each member of the group a number from 1 – 5
 - From expert groups according to numbers
 - Group 1: AS 1 – (Grades 10 to 12)
 - Group 2: AS 2 – (Grades 10 to 12)
 - Group 3: AS 3 – (Grades 10 to 12)
 - Group 4: AS 6 – (Grades 10 to 12)
 - Group 5: AS 7 – (Grades 10 to 12)
 - Each group will discuss the following questions: (30 minutes)
 - Link the content to the ASs
 - Set questions to determine knowledge of subject content
 - Set activities / teaching methods
 - Members return to their home group.(45 minutes)
 - Each member report back on the assessment standard.
 - Every member of the group has knowledge of all the ASs

Select any member of any group to account for any AS. (15 minutes)

Part 3: LO3 (3 hours)

Repeat the same format as used for Part 1: LO1

- Divide into groups and complete the following activity
 - Do a critical study of the Grade 10-12 subject content for the LO
 - What content is to be taught per grade for the Learning Outcome
 - Complete [Appendix 2](#)
 - Every group member should fill in their own worksheet as they will need it later on.
- Report Back By Groups

Go to:

| | | | | |
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| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
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Part 4: (3 hours) Integration within and across the Learning Outcomes

FORM OF ACTIVITY: Presentation, interactive, report back and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, Subject Statement, Learning Programme Guidelines, [Appendix 4](#), [Appendix 5](#), [Appendix 6](#) & [Appendix 7](#)

CONTENT:

- Content, integration and approach to teaching, learning and assessment

INSTRUCTIONS:

In Groups:

- Complete [Appendix 4](#) by following the steps below
 - Study the content for all three Learning Outcomes as addressed in Parts 1-3 and look for authentic links between the content in each – i.e. which of the Assessment Standards from the different Learning Outcomes can be grouped together for teaching, learning and assessment purposes?
 - Is progression evident within the Learning Outcome across the three grades?
 - Identify the verbs to illustrate progression across the grades in the AS.
 - Should any of the content be re-organized to display progression across the grades for each AS? Identify this content.
 - Is integration of content from different Learning Outcomes evident?
- Input on assessment:
 - How, when, who and what to assess in this activity
 - Make suggestions of the tools that can be used to assess learner performance in the activity
 - Who should carry out the assessment to ensure that the integrated skills, knowledge and values are assessed in an
 - effective and
 - efficient manner
- In groups make use of [Appendix 5](#)
 - Identify and list the acquired knowledge and skills after the LO is achieved.
- In groups make use of [Appendix 6](#)
 - Identify a topic that could be integrated from Grade 10 – 12.
 - Identify the possible content relevant to each individual Grade.
 - List the needed LTSM to support teaching and learning in the identified content.
 - Identify the different ASs from the different LOs and tick the relevant box on the worksheet to indicate which of these has been included in your Topic.
 - Show which teaching approach would best suit the topic. Examples have been included in the worksheet.
 - Indicate which learning approach would best adapt to the chosen teaching approach. Examples have been included in the worksheet.
 - Make use of [Appendix 7](#) to critique the topics developed in Appendix 6.

Part 5: (4 hours) Practical Assessment Task

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, Subject Statement, Learning Programme Guideline, SAG Page 25 – 30), [Appendix 8](#)

ADDITIONAL INSTRUCTIONS:

- Provide an overview of the Practical Assessment Task as per the Subject Assessment Guidelines for COMPUTER APPLICATIONS TECHNOLOGY and its role in ensuring the teaching, learning and assessment of the relevant outcomes (LO2 and LO3)
- Allow participants to examine and critique the Practical Assessment Task Criteria (CAT SAG Page 25 – 30) along with the example of an assessment tool:
 - Peruse through criteria for assessment of each phase of the research project and identify the strengths and weaknesses of the criteria list.
 - Improve on the weaknesses. Make suggestions for improvements and/or other types of activities that can be included in each section of the task. Record your group findings on a flip chart.
 - Make use of [Appendix 8](#), identify 1 topic for a PAT in CAT for Gr. 10, 11 & 12 thus resulting in 3 topics in total.
 - Follow the research process steps and determine the criteria needed for each PAT in Grades 10-12 giving attention to the different stages.
- In groups
 - Record on a flip chart the following answers for each topic from Grade 10 – 12
 - Input on assessment: How, when, who and what to assess in this task.
 - also make suggestions of other tools that can be used to assess learner performance in the activity and who should carry out the assessment
- Groups report back

Go to:

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| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
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ACTIVITY 3: Conclusion / Wrap-up (1 hour)

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: PowerPoint Presentation, Laptop, Data Projector, Subject Statement, Learning Programme Guideline

CONTENT:

- Pull all the issues together as discussed in various Learning Outcome discussions
- PowerPoint presentation – highlight the subject content and approach

Go to:

| | | | | |
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| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
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SESSION 3 –

Planning for teaching subjects in the NCS (8 hours)

ACTIVITY 1: Introduction to the planning cycle (½ hour)

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector

CONTENT:

- Three stages of planning
- Purpose, role-players and duration per stage
- Issues to consider when developing a Learning Programme
- Brief overview of the key activities and development process per stage

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

ACTIVITY 2: Introduction to the Grade 11 Work Schedule (1 hour)

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: OHP of Grade 11 Work Schedule, OHP Projector, OHP Pens, OHP Sheets, Subject Assessment Guidelines, Learning Programme Guidelines, Subject Statement

CONTENT:

- Elements of design
- Process of design
 - Integration: What, how and why?
 - Sequencing: What, how and why?
 - Pacing: What, how and why?
 - Suggested assessment tasks: What and why? – will return to this in Session 4
 - LTSM: What and why?

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

ACTIVITY 3: Critique the Grade 11 Work Schedule (3½ hours)

FORM OF ACTIVITY: Interactive, report back and discussion

RESOURCES: Grade 11 Work Schedule, Subject Statement, [Learning Programme Guidelines](#) (Page 51 – 54), Subject Assessment Guidelines, [Appendix 9](#)

CONTENT:

- Grade 11 Work Schedule

INSTRUCTIONS:

- Participants study the example of the Grade 11 Work Schedule (CAT LPG Page 38) provided and critique it using [Appendix 9](#)
 - Does the Work Schedule cover all the Assessment Standards (i.e. content)?
 - Integration: Are the Assessment Standards appropriately linked?
 - Are the Assessment Standards covered in sufficient detail and depth?
 - Pacing: Is the time allocation across the 40 weeks appropriate?
 - Sequencing: Is the content presented in the correct order?
 - Are relevant LTSM listed? If not, list the LTSM required.
 - How can the Work Schedule be improved?
- Groups report back

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

ACTIVITY 4: Development of the first Lesson Plan for Grade 11 (2 hour)

FORM OF ACTIVITY: Presentation, interactive, report back and discussion

RESOURCES: PowerPoint Presentation, Laptop, Data Projector, Subject Statement, Learning Programme Guidelines (Page 58-60), [Appendix 10](#), Grade 10 Lesson Plan.

CONTENT:

- Grade 11 Lesson Plan
 - Elements of design
 - Process of design

INTRODUCTION:

- Lesson Plan: What it is and its duration
 - Provide an overview of the elements and the design process of a Lesson Plan
- Pointers on deciding on the number of Lesson Plans to be written
- Elements and design of a Lesson Plan
- Teaching method: What and why
- Assessment strategy: Who, when, how and form of assessment
- Expanded opportunities: Inclusive approach to accommodate all learners

INSTRUCTIONS:

In groups

- Study the first grouping of ASs that appear on the Grade 11 Work Schedule
 - Decide how many Lesson Plans will be required to teach this AS grouping
 - Record your findings on a Flip Chart.
- Make use of [Appendix 10](#) and develop the 1st Lesson Plan/s for Grade 11 in 2007 making sure to record the:
 - LOs & ASs
 - Content for the Lesson Plan
 - Duration of the Lesson Plan and each activity
 - LTSM required per activity
 - Details of each activity
 - Teaching method(s) per activity
 - Assessment strategy per activity
 - Expanded opportunities per activity
 - Refer to the CAT LPG (Page 58-60) for assistance.
- Report Back
 - Groups to present their lesson planning followed by a discussion on the issue.

Go to:

| | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

ACTIVITY 5: Report back & Wrap Up (1 hour)

FORM OF ACTIVITY: Report back and discussion

RESOURCES: Subject Statement, Learning Programme Guidelines

CONTENT:

- Improved Grade 11 Work Schedule

INSTRUCTIONS:

- Allow different groups to present their improved version of the exemplar Work Schedule for Grade 11
- Engage participants in a discussion after each presentation

SESSION 4 – Annual assessment plan (8 hours)

ACTIVITY 1: Introduction to assessment in the NCS (1/2 hour)

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: [PowerPoint Presentation](#), Laptop, Data Projector, National Protocol on Assessment

CONTENT:

- Approach to assessment: Criteria-driven
- Recording process: Record one global mark / code per task and refer to the Subject Assessment Guidelines for guidance on how to arrive at the final mark for the subject
- Reporting process: 7 codes and percentages
- Portfolios: Teacher and learner

Go to:

| | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

ACTIVITY 2: Programme of Assessment for Grades 10 and 11 (2 1/2 Hours)

FORM OF ACTIVITY: Presentation and discussion

RESOURCES: PowerPoint Presentation, Laptop, Data Projector, Subject Assessment Guidelines

CONTENT:

- Programme of Assessment for Grades 10 and 11 (Section 2 of the Subject Assessment Guidelines Page 9): Number of tasks
- Nature of tasks: Forms of assessment suitable to the subject (Section 3 of the Subject Assessment Guidelines) and suitable tools
- Practical Assessment Task (PAT)
- Weighting of tasks for the formal Programme of Assessment and mark allocation

Go to:

| | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

ACTIVITY 3: Development of a Grade 11 annual assessment plan (2 ½ hours)

FORM OF ACTIVITY: Presentation, interactive and discussion

RESOURCES: PowerPoint Presentation, Laptop, Data Projector, Subject Assessment Guidelines, [Appendix 11](#)

CONTENT:

- Programme of Assessment for Grade 11: Tasks, topics & tools

INSTRUCTIONS:

- Participants critique the Annual Programme of Assessment for grade 11 in the SAG including :Seven tasks: 2 Tests, 2 Examinations, 3 other tasks and PAT(CAT SAG Page 11)
- Complete [Appendix 11](#). and critique the PoA
 - Participants improve on the APoA and record their findings on a flip chart.
- Select one task from the grade 11 POA example in the SAG CAT (page 11)
 - Set the task (problem definition & instructions to learners)
 - Draw up criteria for the marking of the task- N. B. Criteria must be specific
 - Draw up an assessment tool.

Report Back

Go to:

| | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

20 Questions & HE Requirements

Instructions:

- Make use of your knowledge of the NCS and related documents to answer the following questionnaire.
- Fill in all the answers
- Keep answers short and to the point.

| | Answer |
|----|--------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |

Session 1

Activity 3, Part 3

Instructions:

- Fill in the admission requirements for different programmes offered at Higher Education Institutions for courses that fall into the categories indicated below.

| Higher Certificate | Diploma | Bachelors Degree |
|--------------------|---------|------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Examining Subject Content

Instructions

- Divide into groups and complete the following activity
 - Do a critical study of the Grade 10-12 subject content for the LO
 - What content is to be taught per grade for the Learning Outcome
 - Complete [Appendix 2](#)
 - Every group member should fill in their own worksheet as they will need it later on.
- Groups Report Back

LO : 1 - Operational Knowledge of ICTs

| Grades | 10 | AS | 11 | AS | 12 | AS |
|--|----|----|----|----|----|----|
| Content to be taught? | | | | | | |
| What content is new to the group? | | | | | | |
| Is progression evident in the AS's for the LO? | | | | | | |
| Questions that interrogate the subject content | | | | | | |
| Activities that would link to the content | | | | | | |
| List the Knowledge and Skills that the learner would acquire from this LO. | K | | K | | K | |
| | S | | S | | S | |

Examining Subject Content

Instructions

- Jig Saw method-
 - From expert groups according to numbers
 - Group 1: AS 1 – (Grades 10 to 12)
 - Group 2: AS 2 – (Grades 10 to 12)
 - Group 3: AS 3 & 8 – (Grades 10 to 12)
 - Group 4: AS 4 & 9 – (Grades 10 to 12)
 - Group 5: AS 5 – (Grades 10 to 12)
 - Each group will discuss the following questions: (30 minutes)
 - Link the content to the ASs
 - Set questions to determine knowledge of subject content
 - Set activities / teaching methods
 - Members return to their home group.(45 minutes)
 - Each member report back on the assessment standard.
 - Every member of the group has knowledge of all the ASs

LO : 2 - Integrated end-user computer application skills and knowledge in problem solving

| Grades | 10 | AS | 11 | AS | 12 | AS |
|--|----|----|----|----|----|----|
| Content to be taught? | | | | | | |
| What content is new to the group? | | | | | | |
| Is progression evident in the AS's for the LO? | | | | | | |
| Questions that interrogate the subject content | | | | | | |
| Activities that would link to the content | | | | | | |
| List the Knowledge and Skills that the learner would acquire from this LO. | K | | K | | K | |
| | S | | S | | S | |

Examining Subject Content

Instructions

- Divide into groups and complete the following activity
 - Do a critical study of the Grade 10-12 subject content for the LO
 - What content is to be taught per grade for the Learning Outcome
 - Complete [Appendix 2](#)
 - Every group member should fill in their own worksheet as they will need it later on.
- Groups Report Back

LO : 3 - Information Management

| Grades | 10 | AS | 11 | AS | 12 | AS |
|--|----|----|----|----|----|----|
| Content to be taught? | | | | | | |
| What content is new to the group? | | | | | | |
| Is progression evident in the AS's for the LO? | | | | | | |
| List the Knowledge and Skills that the learner would acquire from this LO. | K | | K | | K | |
| | S | | S | | S | |

List of Challenging Topics / New Content in CAT

Instructions

- Individual Activity
 - Using [Appendix 3](#), list possible strategies you could implement in your personal growth plan to address these challenges.
 - List strategies you would suggest to the department that would improve your service delivery.

Possible Strategies to be considered for my personal growth plan.

| Learning Outcome | Nature of Challenge | Strategy to overcome this challenge |
|------------------|---------------------|-------------------------------------|
| 1 | | |
| 2 | | |
| 3 | | |

Notes:

Departmental Strategies that would improve my teaching:

Grade 10

Topic / Scenario

The company, *UBUNTU Travellers* offers tours to South African places of interests. They have branches in four major cities. Bookings can be done electronically. They have an office where all the relevant information can be accessed. From time to time the company embarks on an advertising campaign.

In addition to other information, they also keep information on the following:

- Tours offered - Brochures
- Tour guides – Cost Packages
- Tourist details
- Payment details

Possible Content

Possible LTSM

CAT/IT Teaching Approaches - (Meaningful for learners)

| | | | |
|------------|---------------|-----------------|-------------|
| Case Study | Demonstration | Individual | Group work |
| Assignment | Monitoring | Problem Solving | Questioning |
| Review | Observation | Lecturing | |

Assessment Approach

| | | | |
|---------------|-------------------|------------------|---------------|
| Formal | Non Formal | Checklist | Rubric |
| Memo | Research | Problem Solving | Questioning |
| | | | |

Learning Approach (Dependant on teaching approach)

| | | | |
|-----------------------|----------------------|-------------------------|--------------------------|
| Case Study | Demonstration | Individual | Group work |
| Assignment | Research | Problem Solving | Questioning |
| Review | Observation | Brainstorming | Critical Thinking |
| Role Play | Discussion | Investigation / Explore | Study Criteria |
| Assessment Activities | Q & A | Alternative Solutions | |
| | | | |

Integrated Assessment Standards

Meaningful Assessment, Reflection on success of teaching,

| | | | | | |
|------------|---|------------|---|------------|---|
| LO1 | √ | LO2 | √ | LO3 | √ |
| 10.1.1 | | 10.2.1 | | 10.3.1 | |
| 10.1.2 | | 10.2.2 | | 10.3.2 | |
| 10.1.3 | | 10.2.3 | | 10.3.3 | |
| 10.1.4 | | 10.2.4 | | | |
| 10.1.5 | | 10.2.5 | | | |
| | | 10.2.6 | | | |
| | | | | | |

Diagnostic by nature – shows weaknesses and strengths of teaching and learning on a daily basis

Grade 11

Topic / Scenario (Develop your own Scenario)

Possible Content

Possible LTSM

Integrated Assessment Standards

| LO1 | √ | LO2 | √ | LO3 | √ |
|--------|---|--------|---|--------|---|
| 10.1.1 | | 10.2.1 | | 10.3.1 | |
| 10.1.2 | | 10.2.2 | | 10.3.2 | |
| 10.1.3 | | 10.2.3 | | 10.3.3 | |
| 10.1.4 | | 10.2.4 | | | |
| 10.1.5 | | 10.2.5 | | | |
| | | 10.2.6 | | | |
| | | | | | |
| | | | | | |

CAT/IT Teaching Approaches - (Meaningful for learners)

| | | | |
|------------|---------------|-----------------|-------------|
| Case Study | Demonstration | Individual | Group work |
| Assignment | Monitoring | Problem Solving | Questioning |
| Review | Observation | Lecturing | |
| | | | |

Learning Approach (Dependant on teaching approach)

| | | | |
|-----------------------|----------------------|-------------------------|--------------------------|
| Case Study | Demonstration | Individual | Group work |
| Assignment | Research | Problem Solving | Questioning |
| Review | Observation | Brainstorming | Critical Thinking |
| Role Play | Discussion | Investigation / Explore | Study Criteria |
| Assessment Activities | Q & A | Alternative Solutions | |
| | | | |

Assessment Approach

| | | | |
|---------------|-------------------|------------------------|--------------------|
| Formal | Non Formal | Checklist | Rubric |
| Memo | Research | Problem Solving | Questioning |
| | | | |
| | | | |

Meaningful Assessment, Reflection on success of teaching, Diagnostic by nature – shows weaknesses and strengths of teaching and learning on a daily basis

Grade 12

Topic / Scenario (Develop your own Scenario)

Page 1 of 3

Possible Content

Possible LTSM

Integrated Assessment Standards

| LO1 | √ | LO2 | √ | LO3 | √ |
|--------|---|--------|---|--------|---|
| 10.1.1 | | 10.2.1 | | 10.3.1 | |
| 10.1.2 | | 10.2.2 | | 10.3.2 | |
| 10.1.3 | | 10.2.3 | | 10.3.3 | |
| 10.1.4 | | 10.2.4 | | | |
| 10.1.5 | | 10.2.5 | | | |
| | | 10.2.6 | | | |
| | | | | | |
| | | | | | |

CAT/IT Teaching Approaches - (Meaningful for learners)

| | | | |
|------------|---------------|-----------------|-------------|
| Case Study | Demonstration | Individual | Group work |
| Assignment | Monitoring | Problem Solving | Questioning |
| Review | Observation | Lecturing | |
| | | | |

Learning Approach (Dependant on teaching approach)

| | | | |
|-----------------------|----------------------|-------------------------|--------------------------|
| Case Study | Demonstration | Individual | Group work |
| Assignment | Research | Problem Solving | Questioning |
| Review | Observation | Brainstorming | Critical Thinking |
| Role Play | Discussion | Investigation / Explore | Study Criteria |
| Assessment Activities | Q & A | Alternative Solutions | |
| | | | |

Assessment Approach

| | | | |
|---------------|-------------------|------------------------|--------------------|
| Formal | Non Formal | Checklist | Rubric |
| Memo | Research | Problem Solving | Questioning |
| | | | |
| | | | |

Meaningful Assessment, Reflection on success of teaching, Diagnostic by nature – shows weaknesses and strengths of teaching and learning on a daily basis

Assessing your Scenarios & Planning

Instruction

Use the Checklist below to critique the developed Scenarios in Appendix 6

| Question | Yes | No |
|--|-----|----|
| Does the activity address the Assessment Standards of the integrated Learning Outcome with respect to the skills that will be acquired through exposure to the activity? | | |
| Does the activity address the Assessment Standards of the integrated Learning Outcome with respect to the knowledge that will be acquired through exposure to the activity? | | |
| Does the activity address the Assessment Standards of the integrated Learning Outcome with respect to the values that will be acquired through exposure to the activity? | | |
| Is the activity appropriate for the developmental age of the learner? | | |

Notes – If no please elaborate

Assessment

| Question | Answer |
|--|--------|
| How would you assess the scenario in Appendix 6? | |
| Why would you assess the parts identified in Question 1? | |
| When will you assess the different parts identified in Question 1? | |
| Who will do the assessment and who will be assessed? | |
| What will be assessed? | |
| What tools will be used to assess? | |

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

Practical Assessment Task - Planning

Instructions

- Allow participants to examine and critique the Practical Assessment Task Criteria (CAT SAG Page 25 – 30) along with the example of an assessment tool:
 - Peruse through criteria for assessment of each phase of the research project and identify the strengths and weaknesses of the criteria list.
 - Improve on the weaknesses. Make suggestions for improvements and/or other types of activities that can be included in each section of the task. Record your group findings on a flip chart.
 - Make use of [Appendix 8](#), identify 1 topic for a PAT in CAT for Gr. 10, 11 & 12 thus resulting in 3 topics in total.
 - Follow the research process steps and determine the criteria needed for each PAT in Grades 10-12 giving attention to the different stages.

| Phase 1 and 2: Planning the project and finding appropriate information | | | | | | |
|--|---|--------------------------|---|--------------------------|---|--------------------------|
| Component | Grade 10 – Topic | | Grade 11- Topic | | Grade 12- Topic | |
| | _____ _____ _____ _____ _____ | | _____ _____ _____ _____ _____ | | _____ _____ _____ _____ _____ | |
| | Description | Included in Project? Y/N | Description | Included in Project? Y/N | Description | Included in Project? Y/N |
| Description of Problem / Topic / Need | | | | | | |
| Questions that will direct thinking for solving the stated problem | | | | | | |
| Information Sources | | | | | | |
| Methods that can be used to access information | | | | | | |
| Criteria for the validation of Information | | | | | | |

Appendix 8

| Phase 3: Data collection | | | | | | |
|--------------------------------------|-------------|--------------------------|-------------|--------------------------|-------------|--------------------------|
| Component | Grade 10 | | Grade 11 | | Grade 12 | |
| | Description | Included in Project? Y/N | Description | Included in Project? Y/N | Description | Included in Project? Y/N |
| Evidence of Data Collection – Format | | | | | | |
| Notes | | | | | | |
| Methods of recording Data | | | | | | |
| Questionnaires | | | | | | |
| Checklists | | | | | | |

| Phase 4 and 5: Synthesis and evaluation | | | | | | |
|---|-------------|--------------------------|-------------|--------------------------|-------------|--------------------------|
| Component | Grade 10 | | Grade 11 | | Grade 12 | |
| | Description | Included in Project? Y/N | Description | Included in Project? Y/N | Description | Included in Project? Y/N |
| Outline / planning for presentation of | | | | | | |
| Draft documents / presentations and final documents | | | | | | |
| List of skills needed | | | | | | |
| List of programmes to be used | | | | | | |
| Sequence in which information is to be presented | | | | | | |

Appendix 8

| Phase 6: Presentation | | | | | | |
|---|-----------------|--------------------------|-----------------|-----------------|--------------------------|-----------------|
| Component | Grade 10 | Grade 11 | Grade 12 | Grade 10 | Grade 11 | Grade 12 |
| | Description | Included in Project? Y/N | Description | Description | Included in Project? Y/N | Description |
| Checklist for Information Skills in programme usage i.e. spell check etc | | | | | | |
| Submission of presentation with attention given to appropriate format e-documents hard copies | | | | | | |
| Integration of software packages | | | | | | |
| Usage of database, spreadsheet, word processing | | | | | | |
| Using of application to present | | | | | | |
| Use of hardware | | | | | | |

Go to:

[Programme](#) | [Session 1](#) | [Session 2](#) | [Session 3](#) | [Session 4](#)

CAT Work Schedule

Instructions

- Complete the questions stated below.

1. Does the Work Schedule cover all the Assessment Standards (i.e. content)?

2. Integration: Are the Assessment Standards appropriately linked?

3. Are the Assessment Standards covered in sufficient detail and depth?

4. Pacing: Is the time allocation across the 40 weeks appropriate?

5. Sequencing: Is the content presented in the correct order?

6. Are relevant LTSM listed? If not, list the LTSM required?

7. How can the Work Schedule be improved?

Lesson Plan in Computer Applications Technology

Instructions

- Make use [Appendix 10](#) and develop the 1st Lesson Plan/s for Grade 11 in 2007 making sure to record the:
 - LOs & ASs
 - Content for the Lesson Plan
 - Duration of the Lesson Plan and each activity
 - LTSM required per activity
 - Details of each activity
 - Teaching method(s) per activity
 - Assessment strategy per activity
 - Expanded opportunities per activity

LESSON DETAILS

Grade: _____ **Date(s):** _____ **Time Allocation:** _____

Scenario:
(Lesson context) _____

LEARNING OUTCOMES AND ASSESSMENT STANDARDS

| | | | |
|---------------------------|--|--|--|
| Learning Outcomes: | Learning Outcome 1: Operational knowledge of information and communication technologies | Learning Outcome 2: Integrated end-user computer applications skills and knowledge in problem solving | Learning Outcome 3: Information management |
| | The learner is able to demonstrate operational knowledge of information and communication technologies and the environments in which they operate. | The learner is able to apply and integrate end-user computer applications skills and knowledge to solve problems related to the processing, presentation and communication of information. | The learner is able to apply information management processes and skills using end-user computer applications. |

| | | | |
|---|--|---|--|
| <p>Assessment Standards: <i>(tick)</i></p> | <p>The learner is able to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Briefly describe the basic operation and terminology of relevant computer hardware and software and the aims and objectives of networked environments. <input type="checkbox"/> Install, configure and use input and output devices. <input type="checkbox"/> Describe the concept of file organisation in multilevel directories. <input type="checkbox"/> Identify legal, ethical and security issues related to information technology. <input type="checkbox"/> Describe certain basic issues related to the impact of information and communication technology on the local environment and society. | <p>The learner is able to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate a basic level of competence and accuracy in the input of data. <input type="checkbox"/> Enter, edit and format text, numerical data and graphics using basic techniques in a word processing programme. <input type="checkbox"/> Enter, edit and format text and numerical data using basic functions and formulae in a spreadsheet programme by applying appropriate techniques. <input type="checkbox"/> Demonstrate the ability to use basic integration techniques using word processing and spreadsheet programmes. <input type="checkbox"/> Interpret written layout and editing instructions to produce accurate output. <input type="checkbox"/> Demonstrate understanding of a variety of communication modes and tools. | <p>The learner is able to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Use technologies to locate and collect specific data using relevant methods. <input type="checkbox"/> Extract and record information in appropriate electronic formats. <input type="checkbox"/> Present and communicate information in electronic formats. |
|---|--|---|--|

Topic: _____

| <i>CONTENT ANALYSIS</i> | | | |
|--------------------------|---|---|---|
| Content analysis: | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> |

| | |
|---------------------------|--|
| Lesson Outcome(s): | The Learner is able to: <ul style="list-style-type: none"> • • • • |
|---------------------------|--|

| | | | | |
|----------------------|---|---|--|-------|
| Time planned: | A | Class time | | hours |
| | B | Organised activities outside the class | | hours |
| | C | Learners busy with individual or group activities outside organised activities (e.g. homework and reflection) | | hours |

| | | |
|------------------------------|--|--|
| LTSM: (Resources) | | |
|------------------------------|--|--|

Additional Notes

Go to:

| | | | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Programme | Session 1 | Session 2 | Session 3 | Session 4 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|

CRITIQUE OF ANNUAL PoA**Instructions**

- Critique the Annual Plan of Assessment using the list below.

| Aspect of PoA | Opinion |
|--|---------|
| Is the number of Assessment tasks in line with in line with the requirements as set by the SAG in Section 2? | |
| Are the forms of assessment adequately diverse and in line with the requirements as set by the SAG in Section 2? | |
| Are weightings in the Annual PoA in accordance with the requirements set by the Assessment Programme in the SAG – Section 3? | |
| Are the descriptions of the tasks clear and unambiguous? | |
| Are the tasks in the PoA achievable for the grade level? | |
| Have all LOs been addressed? | |
| Is the mark allocation in line with weighting of the LOs as set out in table 3.1 of section 3? (CAT refer to 3.1.3) | |
| Do mark allocations tally in the annual PoA? | |
| What alternate information would you add to the PoA example in the SAG to enhance further understanding? | |

Computer Applications Technology - 20 QUESTIONS

| Question | Answer | |
|---|-----------|--------|
| 1. How many LOs in CAT? | | |
| 2. What is the focus of each LO? | | |
| 3. How many assessment standards in total in grade 10? | | |
| 4. How many assessment standards in total in grade 11? | | |
| 5. How many assessment standards in total in grade 12? | | |
| 6. How many software packages are compulsory in CAT?. | | |
| 7. Name all these packages. | | |
| 8. List two input and two output devices | Input | Output |
| 9. How will ergonomics affect the CAT Classroom environment? Answer with reference to: a. The physical Classroom | Classroom | |
| 10. State 2 latest computer developments and discuss the implications thereof in the CAT classroom? | | |
| 11. List 2 aspects that you would discuss when dealing with ethical issues relating to the use of computers. | | |
| 12. What is LAN & WAN and what implication does it have on information management in Computer Applications Technology? | | |
| 13. How will you determine which software is suited for Computer Applications Technology? | | |

| | |
|--|--|
| | |
| 14. A brief is given as follows: <ul style="list-style-type: none"> ▪ Navigate the Internet in order to retrieve information. What skills would you assess here? List 3. | |
| 15. How many assessments tasks are required for School Based Assessment (SBA) in grade 10 and 11? | |
| 16. Which SBA tasks are common to grade 10 and 11? | |
| 17. How many assessment tasks are required for School Based Assessment (SBA) in grade 12? | |
| 18. What percentage does the Practical Assessment Task (PAT) constitute in grade 10, 11 and 12? | |
| 19. List any 5 forms of assessment. | |
| | |
| | |
| | |
| | |
| 20. List the assessment tools that you could use. | |
| | |
| | |
| | |
| | |