



**education**

Department:  
Education  
REPUBLIC OF SOUTH AFRICA

# **NATIONAL CERTIFICATES (VOCATIONAL)**

## **SUBJECT GUIDELINES**

### **ART AND SCIENCE OF TEACHING NQF Level 2**

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# **ART AND SCIENCE OF TEACHING - LEVEL 2**

## **CONTENTS**

### **INTRODUCTION**

#### **1 DURATION AND TUITION TIME**

#### **2 SUBJECT LEVEL FOCUS**

#### **3 ASSESSMENT REQUIREMENTS**

3.1 Internal assessment

3.2 External assessment

#### **4 WEIGHTED VALUES OF TOPICS**

#### **5 CALCULATION OF FINAL MARK**

#### **6 PASS REQUIREMENTS**

#### **7 SUBJECT AND LEARNING OUTCOMES**

7.1 Foundations for effective teaching

7.2 Learning contexts and diversity

7.3 Learning content

#### **8 RESOURCE NEEDS FOR THE TEACHING OF ART & SCIENCE OF TEACHING- LEVEL 2**

8.1 Physical resources

8.2 Human resources

8.3 Consumables

8.4 Learning and teaching support materials

## INTRODUCTION

### A. What is Art and Science of Teaching about?

The subject Art and Science of Teaching addresses the whole context of learning and instruction, and the activities involved in being a good teacher. It is the science and theory of educating and learning.

The focus of this subject is on the art and science of teaching children, adolescents, adults and senior adults.

### B. Why is Art and Science of Teaching important in the Education and Development programme?

The rationale for including the Art and Science of Teaching in the Education and Development programme is as follows:

- The subject provides a foundational qualification to those who want to make teaching their career.
- By studying this subject, students will be equipped with skills, attitudes, tools and perspectives that can empower them to anticipate and prepare for a change-driven teaching world.
- The subject links closely with Human and Social Development and Learning Psychology and will provide worthwhile linkages with subjects presented in tertiary institutions.
  - Art and Science of Teaching provides a sound generic foundation for effective teaching, guiding specialisation further along teaching career paths.
- The subject provides for the initiation of a lifelong professional attitude of reflective teaching.

### C. The link between Art and Science of Teaching Learning Outcomes and the Critical and Developmental Outcomes

Art and Science of Teaching enables students to:

- Identify and solve problems and make decisions using critical and creative thinking by identifying, investigating and adapting theories in order to apply them in practice
- Work effectively with others and in groups and teams using interactive strategies and discussions
- Organise themselves and their activities responsibly and effectively in order to manage their own learning
- Collect, analyse organise and critically evaluate information fundamental to understanding by researching, reporting and reflecting on various topics relevant to the subject
- Communicate effectively using visual, symbolic and/or language skills during presentations, mural displays, mind-maps, diagrams and micro-teaching
- Use appropriate technology effectively and critically to make learning resources and access information about relevant topics
- Be culturally and aesthetically sensitive across a range of human contexts by implementing anti-bias and culture-fair attitudes, values and practices that also involve role-play, displays and presentations.
- Reflect on and explore their own abilities, learning styles and strategies which are fundamental to lifelong learning.

### D. Factors that contribute to achieving Art and Science of Teaching Learning Outcomes

- Communication skills
- Ability to do research
- Observational skills
- Creativity
- Problem-solving and decision-making skills
- Good group participant

## 1 DURATION AND TUITION TIME

This is a one-year instructional programme comprising 200 teaching and learning hours. The subject may be offered on a part-time basis provided the student meets all the assessment requirements.

Students with special education needs (LSEN) must be catered for in a way that eliminates barriers to learning.

## 2 SUBJECT LEVEL FOCUS

- Describe teaching and learning dynamics
- Explain the theory of participative learning
- Describe the teacher's roles from a participative practice perspective
- Describe the students' roles from a participative practice perspective
- Describe the learning environment from a participative practice perspective
- Explain the theory of individual with respect to autonomous teaching and learning
- Explain the roles of the teacher and learner from an autonomous individual teaching and learning perspective
- Explain the meaning of learning context and diversity
- Distinguish different factors that determine the learning context
- Describe mediation of learning through learning and teaching support materials
- Define and explain basic theories of knowledge
- Describe the needs of society in terms of learning content. Explain the role of interests and needs of students in terms of the selection of learning content
- Describe ways to access sources of learning content.

## 3 ASSESSMENT REQUIREMENTS

### 3.1 Internal assessment (50 percent)

#### 3.1.1 Theoretical component

The theoretical component forms 50 percent of the internal assessment mark.

Internal assessment of the theoretical component in Art and Science of Teaching Level 2 takes the form of observation, class questions, group work, informal group competitions with rewards, individual discussions with students, class, topic and semester tests and internal examinations. Lecturers can observe students when marking exercises from the previous day and asking class questions.

Assignments, case studies and tests can be completed at the end of a topic. Tests and internal examinations must form part of the internal assessment.

#### 3.1.2 Practical component

The practical component forms 50 percent of the internal assessment mark.

Practical components include applications and exercises. All practical components must be indicated in a Portfolio of Evidence (PoE).

Internal assessment of the practical component in Art and Science of Teaching Level 2 takes the form of assignments, practical exercises, case studies and practical examinations in a simulated education environment.

Students may complete practical exercises daily. Assignments and case studies can be completed at the end of a topic. Practical examinations can form part of internal practical assessment.

- **Some examples of practical assessments include, but are not limited to:**
  - Presentations (lectures, demonstrations, group discussions and activities, practical work, observation, role-play, independent activity, synthesis and evaluation)
  - Exhibitions by students

- Visits undertaken by students based on a structured assignment task
- Research
- Task performance in a “Structured Environment”

- **Definition of the term “Structured Environment”**

For the purposes of assessment, “Structured Environment” refers to a simulated workplace or education environment. Activities in the simulated workplace or environment must be documented in a logbook with a clear listing of the competencies to be assessed. The following information must be contained in the logbook:

- Nature of department or environment in which practical component was achieved
- Learning Outcomes
- Activities in the environment with which to achieve the Learning Outcomes
- Time spent on activities
- Signature of facilitator or supervisor and student

For the logbook to be regarded as valid evidence, it must be signed by an officially assigned supervisor.

- **Evidence in practical assessments**

All evidence pertaining to evaluation of practical work must be reflected in the student’s Portfolio of Evidence. The tools and instruments used for the purpose of conducting these assessments must be part of the evidence contained in the PoE.

### 3.1.3 Processing of internal assessment mark for the year

A year mark out of 100 is calculated by adding the marks of the theoretical component and the practical component of the internal continuous assessment (ICASS).

### 3.1.4 Moderation of internal assessment mark

Internal assessment is subject to internal and external moderation procedures as set out in the *National Examinations Policy for FET College Programmes*.

## 3.2 External assessment (50 percent)

A national examination is conducted annually in October or November by means of a paper(s) set and moderated externally. The practical component will also be assessed.

External assessment details and procedures are set out in the *Assessment Guidelines: Art and Science of Teaching Level 2*.

## 4 WEIGHTED VALUES OF TOPICS

TOPICS	WEIGHTED VALUE
1 Foundations for Effective Teaching	40%
2 Learning Context and Diversity	30%
3 Learning Content	30%
<b>TOTAL</b>	<b>100</b>

## 5 CALCULATION OF FINAL MARK

Internal assessment mark: Student’s mark/100 x 50 = a mark out of 50 (a)

Examination mark: Student’s mark/100 x 50 = a mark out of 50 (b)

**Final mark: (a) + (b) = a mark out of 100**

All marks are systematically processed and accurately recorded to be available as hard copy evidence for, amongst others, reporting, moderation and verification purposes.

## 6 PASS REQUIREMENTS

A student must obtain at least fifty percent in internal continuous assessment and fifty percent in the examination to achieve a pass in this subject.

## 7 SUBJECT AND LEARNING OUTCOMES

On completion of Art and Science of Teaching Level 2, the student should have covered the following topics:

- Topic 1: Foundations for Effective Teaching  
Topic 2: Learning Contexts and Diversity  
Topic 3: Learning Content

### 7.1 Topic 1: Foundations for Effective Teaching

**7.1.1 Subject Outcome 1:** Explain the subject Art and Science of Teaching and the rationale for its inclusion in the qualification

**Learning Outcomes:**

The student should be able to:

- Define Art and Science of Teaching as a subject.
- Discuss the rationale for Art and Science of Teaching and the need for its inclusion in the qualification.

**7.1.2 Subject Outcome 2:** Describe teaching and learning dynamics

**Learning Outcomes:**

The student should be able to:

- Explain the meaning of teaching and learning dynamics.
- Explain the links between the components of the teaching and learning situation.
- Explain the meaning of high quality teaching and learning.
- Make a list of own beliefs in terms of teaching and learning.

**7.1.3 Subject Outcome 3:** Explain the theory of participative learning

**Learning Outcomes:**

The student should be able to:

- Explain the meaning of participative learning.
- Give the theoretical background of participative learning.
- Describe the requirements for participative learning.
- Explain the importance of and rationale for a participative approach to learning.

**7.1.4 Subject Outcome 4:** Describe teachers' roles from a participative practice perspective

**Learning Outcomes:**

The student should be able to:

- List the seven roles of a teacher
- Investigate and link the teachers' roles to participative learning
- Describe the characteristics of a participative teacher

**7.1.5 Subject Outcome 5:** Describe students' roles from a participative practice perspective

**Learning Outcomes:**

The student should be able to:

- Describe the responsibilities of students in terms of participative learning.
- Describe the essential characteristics of a participative student.

**7.1.6 Subject Outcome 6:** Describe the learning environment from a participative practice perspective

**Learning Outcomes:**

The student should be able to:

- Describe the relevance of the link between content and learning environment from a participative practice perspective.
- Describe the requirements of the learning environment for participative learning.

#### **7.1.7 Subject Outcome 7:** Explain the theory of individual autonomous teaching and learning

##### **Learning Outcomes:**

The student should be able to:

- Describe the meaning of individual autonomous teaching and learning.
- Give the theoretical background of individual autonomous teaching and learning.
- Explain the methods most suitable for individual autonomous learning.
- Describe the requirements for individual autonomous teaching and learning.
- Explain the benefits and disadvantages of individual autonomous learning.
- Explain the importance and rationale for an individual autonomous approach to learning.
- Suggest strategies to overcome the barriers to individual autonomous learning and digital e-learning.

#### **7.1.8 Subject Outcome 8:** Describe the roles of the teacher and student from an individual autonomous teaching and learning perspective

##### **Learning Outcomes:**

The student should be able to:

- Investigate and link the teachers' roles to individual autonomous learning.
- Describe the characteristics of a teacher for individual autonomous students.
- Describe the responsibilities of students in terms of individual autonomous learning.
- Give own opinion on the characteristics needed by an individual autonomous student.

## **7.2 Topic 2: Learning Context and Diversity**

#### **7.2.1 Subject Outcome 1:** Explain the meaning of learning context and diversity

##### **Learning Outcomes:**

The student should be able to:

- Describe what is meant by context analysis.
- Indicate the kind of context information needed for lesson planning.
- Identify diversity in a multi-cultural learning environment.
- Present guidelines to integrate content in a diverse learning environment.
- Explain how education for diversity can be implemented.

#### **7.2.2 Subject Outcome 2:** Distinguish factors that determine the learning context

##### **Learning Outcomes:**

The student should be able to:

- Indicate the different aspects to be considered by teachers when information about students is needed.
- Explain the meaning of social and cultural background.
- Describe all the aspects of development that need to be considered when planning lessons.
- Analyse information about language as a factor that determines the learning context.
- Explain what is meant by the use of appropriate learning content
- Identify the criteria on which the selection of learning content is based
- Describe the ordering of learning content

#### **7.2.3 Subject Outcome 3:** Describe mediation of learning through learning and teaching support materials

##### **Learning Outcomes:**

The student should be able to:

- Explain the meaning of learning and teaching support materials.
- Describe the function of learning and teaching support materials.
- Identify the types of learning and teaching support materials.



- Describe the principles that determine the selection of learning and teaching support materials (concrete to abstract; perception)
- Explain how learning and teaching support materials affect learning experiences.

### **7.3 Topic 3: Learning Content**

#### **7.3.1 Subject Outcome 1:** Define and explain basic theories of knowledge

##### **Learning Outcomes:**

The student should be able to:

- Explain the theories on the nature of knowledge and how to acquire it.
- Explain theories on why humans seek knowledge.
- Give own opinion on why knowledge is needed.

#### **7.3.2 Subject Outcome 2:** Describe the needs of society in terms of learning content

##### **Learning Outcomes:**

The student should be able to:

- Explain society's need for literacy.
- Describe economic development as a need of society in terms of learning content.
- Describe information technology as a need of society in terms of learning content.
- Describe democratisation as a need of society in terms of learning content.

#### **7.3.3 Subject Outcome 3:** Explain the role of interests and needs of students in terms of the selection of learning content

##### **Learning Outcomes:**

The student should be able to:

- Explain the interests and needs of students that affect the selection of learning content.
- Describe how experiences of students affect learning content selection. (Explain the role of biases)
- Explain what is meant by the use of appropriate learning content.
- Identify the criteria on which the selection of learning content is based.
- Describe the ordering of selected learning content.

#### **7.3.4 Subject Outcome 4:** Describe ways to access sources of learning content

##### **Learning Outcomes**

The student should be able to:

- Explore printed materials as sources of information.
- Investigate technologies as sources of information.
- Identify people as sources of learning content.

## **8 RESOURCE NEEDS FOR THE TEACHING OF ART AND SCIENCE OF TEACHING - LEVEL 2.**

### **8.1 Physical resources**

- Rooms equipped with data projectors, white boards, flip chart paper, overhead projectors, screens, TV monitors, video/DVD players
- Research and resource centres with access to computers and internet; subject related magazines and DVDs and videos
- Simulation room/learning environment for practical demonstrations, micro-teaching, presentations, etc.

### **8.2 Human Resources**

- Librarian
- Lecturer suitably qualified with at least a B.Ed, with subject-related qualification on NQF Level 6
- Assessor / moderator

### **8.3 Consumables**

- Stationery
- Files for Portfolios of Evidence
- Blank CDs, flash discs, video cassettes
- Writable transparencies
- Appropriate pens, pencils, erasers

### **8.4 Learning and teaching support materials**

- Student guides
- Assessment guides
- Modules
- Policies on education, assessment, inclusion