



education

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NATIONAL CERTIFICATES (VOCATIONAL)

SUBJECT GUIDELINES

ART AND SCIENCE OF TEACHING

NQF Level 3

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ART AND SCIENCE OF TEACHING - LEVEL 3

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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

- Investigate, analyse and differentiate approaches in education
- Define outcomes and identify the South African outcomes framework
- Explain the components of an OBE curriculum
- Identify and explain the general principles of the art and science of teaching
- Describe the principles of cooperative learning
- Analyse and interpret the stated concepts of teaching strategies and methods
- Select and describe teaching strategies and methods and their use in ways that meet the needs of the students in simulated situations and contexts
- Explain and implement teaching strategies and methods to accommodate particular needs of students in simulated practice.

3 ASSESSMENT REQUIREMENTS

3.1 Internal assessment (50 percent)

3.1.1 Theoretical component

The theoretical component forms 40 percent of the internal assessment mark.

Internal assessment of the theoretical component in Art and Science of Teaching Level 3 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 60 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 3 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 3*.

4 WEIGHTED VALUES OF TOPICS

TOPICS	WEIGHTED VALUE
1 Approaches in Education	30%
2 Teaching Principles	35%
3 Teaching Strategies and Methods	35%
TOTAL	100

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 3, the student should have covered the following topics:

- Topic 1: Approaches in Education
Topic 2: Teaching Principles
Topic 3: Teaching Strategies and Methods

7.1 Topic 1: Approaches in Education

7.1.1 Subject Outcome 1: Analyse different approaches in education

Learning Outcomes:

The student should be able to:

- Investigate approaches in education.
- Define the concept curriculum.
Range: Macro, meso and micro planning
- Differentiate between major curriculum theories.

7.1.2 Subject Outcome 2: Define outcomes and identify the South African outcomes framework

Learning Outcomes:

The student should be able to:

- Describe the theoretical background of outcomes-based education (OBE).
- Investigate and present a historical background of outcomes-based education.
- Explain the terminology of outcomes-based education.
- Investigate and describe the principles of outcomes-based education.
- Outline and explain the National Qualifications Framework.
- Distinguish the advantages and disadvantages of an outcomes approach to education.

7.1.3 Subject Outcome 3: Explain components of an Outcomes Based Education curriculum

Learning Outcomes:

The student should be able to:

- Investigate and list the components of the outcomes-based curriculum.
- Define and explain outcomes as a component.
- Distinguish the main types of outcomes
- Describe the factors that determine context as a component of outcomes-based education.
- Explain learning content as a component of outcomes-based education.
- Describe strategy as a component of outcomes-based education.
- Describe assessment as a component of outcomes based education.
- Write learning outcomes and assessment standards for particular lessons
- Give own opinion of outcomes-based education

7.2 Topic 2: Teaching Principles

7.2.1 Subject Outcome 1: Identify and explain the general principles of the art and science of teaching

Learning Outcomes:

The student should be able to:

- Define the concept principle.
- Explain the meaning of traditional principle and describe the principle.
- Demonstrate how the traditional principle is implemented.
Range: Known to unknown; simple to complex; concrete to abstract.
- Explain the meaning of the principle of totality.
- Describe the characteristics of the totality principle.
- Explain the principle of activity.
- Describe the socialisation principle.
- Explain the principle of authority and freedom.
- Explain the perception principle.
- Select and implement a principle in a simulated context.
- Reflect on the selected and implemented principle.

7.2.2 Subject Outcome 2: Describe the principles of cooperative learning

Learning Outcomes:

The student should be able to:

- Define cooperative learning.
- Investigate and list the principles of cooperative learning.
- Identify and explain the concepts used in cooperative learning.
- Present guidelines for using cooperative learning.
- Investigate the methods used for cooperative learning.
- Apply particular methods for cooperative learning in various simulated contexts.
- Reflect on the advantages and disadvantages of cooperative learning in various contexts

7.2.3 Subject Outcome 3: Describe the National Curriculum Statement principles

Learning Outcomes:

The student should be able to:

- Identify and explain the National Curriculum Statement principles by using examples.
- Explain equity and social justice.

7.3 Topic 3: Teaching Strategies and Methods

7.3.1 Subject Outcome 1: Interpret and define teaching concepts and methods

Learning Outcomes:

The student should be able to:

- Define the concepts 'teaching strategy' and 'teaching method'.
- Distinguish between participative and expository methods.
- Investigate and describe different teaching methods:

Range:

- *Discussion*
- *Questioning*
- *Project*
- *Role-play*
- *Small-group work*
- *Problem-solving*
- *Cooperative learning*
- *Research*
- *Case study*
- *Writing*

7.3.2 Subject Outcome 2: Select and describe teaching strategies and methods and their use

Learning Outcomes:

The student should be able to:

- Select specific teaching methods to accommodate particular needs of students.
- Explain how specific teaching methods can meet the needs of students.
- Plan and prepare lesson plans on teaching strategies and methods for particular simulated needs of students.

7.3.3 Subject Outcome 3: Explain and implement teaching strategies and methods in simulated practice

Learning Outcomes:

The student should be able to:

- Implement teaching strategies and methods to accommodate particular needs of students.
- Reflect on the application of specific lesson plans.

8 RESOURCE NEEDS FOR THE TEACHING OF ART AND SCIENCE OF TEACHING - LEVEL 3

8.1 Physical resources

- Rooms equipped with data projectors, white boards, flip chart paper, overhead projectors, screens, TV monitors, video and/or DVD players
- Research and resource centres with access to computers and internet; subject related magazines, 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

8.5 Learning and teaching support materials

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