

SAQA QUALIFICATION TITLE: BACHELOR OF SCIENCE IN ENVIRONMENTAL HEALTH

(BSc in Environmental Health)

Classification of Educational Subject Matter (CESM) 2008

CESM 09: Health Professions and Related Clinical Sciences

A broad area of study which prepares individuals to practice as professionals, technicians/technologists and assistants in the health care professions and also focuses on the study of related clinical sciences.

CESM 0913: Public Health

CESM: 091302 Environmental Health

National Qualification Framework (NQF) Level 08

Minimum Credits 480

Purpose of the Qualification

To produce Environmental Health Practitioners that will be able to implement the principles of risk assessment and management in order to improve the health of the community and contribute to sustainable development.

The curriculum will enable them to be to evaluate the effectiveness and efficiency of control measures in order to make necessary improvements.

Module Name: Sustainable Development 101

NQF level 5

Subject Code: BSSD101

1. Purpose of the Module

This module introduces students to key concepts, literature and debates to understand relationships between the pillars of sustainable development (economic, environmental/ecological, and social - people, planet and profits) as they impact on Environmental Health.

Sustainable Development (SD) is one of (10) modules for the first year of study in the Bachelor of Science Degree in Environmental Health in the Faculty of Natural Sciences.

2. Higher Education Qualifications Sub-Framework (HEQSF)

This module is pitched at level 5 according to HEQSF

Module credits: **9 credits** And Work Integrated Learning (WIL) credits: **08 credits**

3. PREREQUISITE/S FOR THIS COURSE

National Matric Certificate (NSC) with Physical Science (4); Mathematics (4); Life Sciences (4); English (4). Recommended Subjects (Additional): Geography (4); Agricultural Sciences (4).

4. Learning outcomes

By the end of the module students will:

- Be able to critically engage with and understand the complexity of sustainable development issues.
- Be familiar with the key concepts and terminology commonly used in sustainable development.
- Understand and be able to critically compare and contrast the main principles and values of the three main ‘pillars’ of sustainable development: economy, ecology and society.
- Understand the philosophical and political history of the emergence of sustainable development and the purposes and negotiations involved in the creation and processes of key international conventions and events guiding approaches to addressing sustainable development issues.

5. Module content

- Sustainable development: concept, principles and critiques
- Sustainable development and poverty reduction
- Institutions, livelihoods and the environment
- Political ecology: challenging narratives of environmental degradation
- Economics and sustainable development: an introduction
- Natural resource governance: theory and practice
- The natural resource curse, economic growth and conflict: debates and evidence
- Climate change: mitigation, international negotiations and threats to developing countries; adaptation responses and plans
- Environmental and social impact assessment

6. CRITICAL CROSS FIELD OUTCOMES

Critical cross-field (CCFO's) outcomes are generic outcomes that inform our teaching and learning as prescribed by HEQSF. They refer to required skills and competencies such

accessing information, problem-solving, working well with others and influencing decision making.

Furthermore, the CCFO's is what will help you to learn naturally through the activities (assignments, reports and projects) given to you. These are very important for your personal development and essential for you as a student environmental health professional.

Level Descriptors: NQF Level Five

- i. **Identify and solve problems** in which responses demonstrate that responsible decisions using critical and creative thinking have been made.
- ii. **Work effectively with others** as a member of a team, group, organization, community.
- iii. **Organise and manage oneself** and one's activities responsibly and effectively.
- iv. **Collect, analyse, organise and critically evaluate information.**
- v. **Communicate effectively** using visual, mathematical and/or language skills in the modes of oral and/or written presentation.
- iv. **Use science and technology effectively and critically**, showing responsibility towards the environment and health of others.
- vii. **Demonstrate and understanding of the world** as a set of related systems by recognizing that problem solving contexts do not exist in isolation.

7. Assessment plan

Learning Outcomes	Assessment Criteria
Describe advances the concept and principles of sustainable development	In the form of a written assignment and a control test: <ul style="list-style-type: none">• Defining sustainable development• Giving the ultimate aim of the concept of sustainable development• Indicating a framework for the integration of environment policies and development strategies
Discuss the relationship between health, environment, and sustainable development	In the form of a presentation:

	<ul style="list-style-type: none"> • Indicating the components of a healthy environment – clean air and water as a public good • Explaining the concept of conserving resources for future generations • Elaborating on the <i>polluter pays</i> and <i>precautionary</i> principles
Apply the principles of sustainable development in the assessment of living conditions in the environment	<p>In the form of a control test essay:</p> <ul style="list-style-type: none"> • Applying the integration of environmental, social and economic concerns in aspects of decision making for environmental health practice.
Comprehensive understanding of the subject is tested	The Final Examination that covers all the learned areas.
Perform an activity for Work Integrated Learning (WIL)	<p>In the form of a report in the portfolio of evidence:</p> <ul style="list-style-type: none"> • Conducting a site visit in the context of a sustainable development initiative • Demonstrating the use of <i>assessment</i> for decision information • Submitting a portfolio of evidence - a requirement before writing final examination for the module.

The curriculum is subject to reviews based on the needs of the class

The final and detailed curriculum, including the reading list, will be published on the Learning Management page of the course

RECOMMENDED READINGS RESOURCES

1. <http://www.etu.org.za/toolbox/docs/development/sustainable.html>

Sustainable Development

What is in this guide?

This guide is meant to provide a basic understanding of sustainable development and a practical guide to sustainable development. It has the following sections:

1. What is sustainable development?
2. Striking a balance between preserving our limited natural resources and overcoming poverty
3. 25% of the population of the world consumes 75% of its natural resources annually
4. Sustainable development is beginning to take root globally
5. People, development and the environment
 - 5.1 The world as an ecosystem
 - 5.2 Natural resources are necessary to sustain life on earth
 - 5.3 Development and its dependence on natural resources
 - 5.4 Sustainable use of resources
 - 5.5 Who uses the most resources?
 - 5.6 Our consumer society
 - 5.7 Population growth and natural resources
 - 5.8 Will the world run out of resources soon?
 - 5.9 Towards sustainable development
6. A practical guide to sustainable development
 - 6.1 Building homes in such a way that they are warm in winter and cool in summer (thermally efficient)
 - 6.2 Use energy efficient devices in homes
 - 6.3 Use the right energy source for the right activity
 - 6.4 Composting toilets
 - 6.5 Biogas digesters
 - 6.6 Grey waste water system
 - 6.7 Rainwater harvesting
 - 6.8 Landscaping
 - 6.9 Waste recycling
7. President's speech

A place called home : environmental issues and low-cost housing / Merle Sowman, Penny Urquhart ; illustrations by Henry Aikman and Piet Theron.

Language: Undetermined

Authors: Sowman, Merle

Publication Information: Cape Town : University of Cape Town Press, 1998.

Physical Description: viii, 192 pages : illustrations ; 25 cm

Publication Type: Book

Document Type: Non-fiction

Subject Terms: Low-income housing -- Environmental aspects -- South Africa

Abstract: Summary: "Quality of life, a healthy environment and sound development are closely linked. This book provides ideas and guidance on the upgrading of informal settlements and planning of low cost housing projects so that they are environmentally sustainable. By considering environmental factors at all stages of the planning, design and development process, living conditions in such settlements and housing projects can be significantly improved." Includes a list of useful addresses.

Notes: Includes bibliographical references (pages 186-188) and index.
1 10 11

Other Authors: Urquhart, Penny

13. ACADEMIC SUPPORT SERVICES AND RESOURCES

To ensure that you have all the support you need to complete this course successfully, you can access the details of the resources and academic support services through the following hyperlinks/QR Codes - accessed via <http://www.mut.ac.za/student-portal/>

14. RESOURCES

- Recommended e-books –Library Services

- **eBook**



Sustainable Development Handbook

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 - ▶ Chapter 2—Sustainable Development

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Language: Undetermined

Authors: [Reid, David](#)

Publication Information: London : Earthscan, 1995.

Physical Description: xi, 261 p

Publication Type: Book

Document Type: Non-fiction

Subject Terms: [Sustainable development](#)
[Environmental policy](#)

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