

School Programmes 2017



Grade R - 12

Our Vision

Delta Environmental Centre– Dedicated to creating a sustainable environment through educating and training for all.

Delta Environmental Centre (DEC) is a private, independent Non Profit Company that aims, through innovative education and training programmes and consultation, to enable people to improve the quality of their environment by promoting the management and sustainable use of all resources in line with the South African Constitution.

Our Mission

Creating a sustainable environment through education and training communities and societies by;

- Up-skilling of learners, youth, teachers, municipal staff, business leaders etc.;
- Developing awareness about environmental issues through imparting / sharing appropriate knowledge;
- Introducing new and innovative knowledge, skills and values towards the environment; and
- Encouraging participation in sustainable and inclusive environmental action projects.

Our Programmes...

All our programmes make extensive use of the Delta Environmental Centre as well as Delta Park. Our programmes are designed to meet the curriculum requirements at all levels and are aligned to the CAPS requirements. Our programmes may also be altered to suit any specific needs.

Our Facilities...

Our facilities are extensive and include the Delta building with a Natural History Museum, The Room of Life with aquariums, insect collection and skulls, the Energy Room and the Water Room as well as Delta Park (104ha) that incorporates the Florence Bloom Bird Sanctuary, the SASOL Sensory Trail and Rand Water's Water Wise Garden, three dams, the Braamfontein Spruit and Recycling Drop Off facilities, all which serve as an "outdoor classroom".

Delta Environmental Centre also offers...

- Team Building using Environmental Themes
- Orienteering
- Accredited Higher Education and Training Courses
- Rand Water Partnership with the Water Wise Education Team
- Environmental Consultancy
- Conference Venues
- Resource Development
- Workshops with Environmental Themes
- Community Service Sites.

Our Contact Details...

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Parkview

2122



Our Costs...

R57.00 per leamer per 3 hour programme
R30.00 per leamer per 1½ hour programme
(no charge for teachers)

(Please note that these costs will go up in April 2017)



Grade R**The Four Seasons**

The weather and how nature, animals and people are affected.

Shapes and Colours in Nature

Using the environment around us to look at and name different shapes and colours.

Our Senses – Touch, Smell, Sight and Taste

Using the environment around us to explore our senses.

The 4 R's - A Healthy Environment

The importance of a clean environment and recycling.

Bird Bonanza

Exploring different types of birds and their general characteristics.

Grade 1**Grow for Life - Plants and Seeds**

Why plants are important, different types of plants, what they need to grow, where seeds come from and how to grow a plant from a seed.

Grade 2**Circle of Life- What Do We Need to Live**

Sun, air, water, soil and water and their importance in our environment.

Animal Homes

Animals, other creatures' and their homes.

Grade 3**Creepy Crawlies-Insects and Life Cycles**

Characteristics of an insect, the variety of insects, observing them and exploring how insects help or harm us. Exploring the life cycle of an insect.

Pollution Busters

What is pollution, the different types and the effects of pollution on people and the environment? Exploring what happens to our waste and finding out about reducing, re-using and recycling.

Grade 4**Living and Non Living Things**

Characteristics of living and non-living things and exploring the requirements of plants and animals.

Wild Animals in Cities and Towns

Habitats are the places where animals feed, hide, produce young and provide shelter.

Grade 5**Biodiversity of Living Things**

Exploring food chains. Plants make their own food but depend on light, soil, air and water while animals cannot make their own food, depending on plants for their energy.

Grade 6**Natural Resources and Ecosystems**

The ecosystem: interrelationships between plants and animals and abiotic factors. Explore potential threats to ecosystems and how to overcome these.

World of Insects

Exploring the beauty of insects, their ecology, adaptations and conservation.

Reduce, Re-Use & Recycle Waste Programmes**Grade 4:**

Waste classification, exploring how waste is created, recycling and reusing potential of waste items and understanding 3D shapes using waste items.

Grade 5:

Learners explore ways in which waste is recovered, reused and recycled, how landfills are constructed and ways to manage waste sustainably.

Grade 6:

Exploring classification of materials, separation at source and waste reduction, and waste management for longer life spans of landfill sites.

Grade 7**Exploring Biosphere and Biodiversity**

The concept of the biosphere and the requirements for sustaining life. Understanding biodiversity and the classification of living things while exploring the diversity of animals and plants on earth.

Grade 8**Ecology and Ecosystems**

An introduction to ecology, ecosystems and food chains and webs that occur within the ecosystems. Identifying adaptations that occur in an ecosystem and the importance of conserving an ecosystem.

Grade 9**Energy Use in SA:
Resource Use and Sustainability**

Identifying renewable and non-renewable resources and the effects of unwise use of resources. Exploring the concepts of sustainable and unsustainable resource use and the role of consumers in reducing pressure on resources. Exploring the cost of electrical consumption and how energy use has an impact on the environment. An introduction to the greenhouse effect is also included in the programme.

Grade 10**Biosphere to Ecosystems – Investigation of an Ecosystem****Programme supporting SBA**

A fieldwork component is required where learners need to investigate the concept of an ecosystem, its structure and functioning. Learners will identify a study area within an ecosystem (either at Delta Park or at Melville Koppies Nature Reserve). Making use of field guides and keys, learners will gather data pertaining to the physiographic, abiotic and biotic factors of the chosen ecosystem as well as explore the energy flow and relationship to the trophic structure of their ecosystem. They will analyse and interpret the data for their SBA report. Learners will have an opportunity to discuss the positive and/or negative human impact on their chosen ecosystem.

Grade 11 & 12**Resource Use and Sustainability**

Exploring the relationship between resources and economic development, exploitation and depletion of resources and concepts of sustainability and sustainable use of resources. Learners will study conventional energy sources and their impact on the environment as well as non-conventional sources of energy. South Africa's changing energy needs will be explored and energy management towards greener economies and sustainable lifestyles will be discussed. Learners will also be encouraged to start an energy savings campaign and the programme outlines the steps that can be used to design and implement such a campaign.

