# Course Outline

EDGDS6013 SCIENCE CURRICULUM 1

**Title:** SCIENCE CURRICULUM 1

**Code:** EDGDS6013

**Formerly:** TD770

**School / Division:** School of Education

**Level:** Advanced

**Pre-requisites:** (Required level of undergraduate study in discipline as specified by VIT)

**Co-requisites:** Nil

**Exclusions:** (TD770)

**Progress Units:** 15

**ASCED Code:** 070301

**Objectives:**

After successfully completing this course, students should be able to:

**Knowledge:**

- understand and appreciate the nature of Science as a constantly developing field of knowledge and understanding, and the processes of science which support this development;
- develop an interest leading to the desire to increase knowledge of the scientific understandings and developments which impact on our lives;

**Skills:**

- identify, evaluate and develop particular teaching skills and strategies (including the use of learning technologies) needed to create optimum learning conditions in their classes;

**Values:**

- critically consider different models of teaching and learning, including inquiry based approaches, the value assumptions underlying them, and to relate these to their own teaching of science;
- consider the changing role of education and teachers in our society, constantly evaluate their own role and practice, and to defend the latter in terms of societal changes.

**Content:**

The course content includes the following:

Topics may include:

- Science as a field of human knowledge and endeavour, the links between Science and other areas of knowledge and between the traditional Science disciplines;
- generic teaching skills and their application in the Science classroom;
- specific teaching and learning strategies in years 7 to 10 science; eg. constructivist learning, practical work, use of ICT, safety issues, discovery learning, excursions and critical evaluation of these;
- Science teaching - lesson planning, implementation, assessment and reflection
- • links between learning theories and practical teaching

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## Learning Tasks & Assessment:

| Learning Task | Assessment | Weighting |
|---|---|---|
| Practical demonstration and preparation of a teaching guide for class members showing links to the VELS | Presentation to science learners and evaluation. | 30 - 40% |
| Lesson plans, reflections on lessons, Science department culture, and individual development of teaching skills | Preparation of a teaching journal | 30 - 40% |
| Preparation of a teaching sequence that allows students to attain stated learning outcomes | Teaching sequence presented | 30 - 40% |

## Adopted Reference Style:

APA