Title: SENIOR SCIENCE CURRICULUM 2

Code: EDGDS6116

Formerly: TD774

School / Division: School of Education

Level: Advanced

**Pre-requisites:** (EDGDS6015 or TD773)

Co-requisites: Nil

**Exclusions:** (TD774)

**Progress Units:** 10

**ASCED Code:** 070301

### **Objectives:**

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

## Knowledge:

- Demonstrate a sound knowledge of the VCE Study Designs in Biology, Chemistry or Physics, particularly in Units 1 and 4;
- Continue to display a cohesive knowledge of the appropriate biological or physical sciences, and how they interact in effective teaching;
- Demonstrate good understandings of the rationale, methodology and teaching techniques relevant to VCE Biology, Chemistry or Physics
- Design detailed teaching plans for Units 2 and 4 and within the unit framework design lesson plans, unit plans and area of study plans which integrate a range of activities, resources, and materials to support learning, including the use of ICT and other learning technologies;
- Continue to understand and develop the links between effective planning, teaching, and assessment areas, specifically school assessed coursework in Unit 4.

#### Skills:

- Devise valid methods for assessment in VCE Units 2 and 4, in line with VCE guidelines for Biology, Chemistry or Physics;
- Show further skill development in the teaching of Biology, Chemistry or Physics, using theoretical frameworks and practical ability to produce effective learning for a wide range of students;
- Understand the rationale for school assessed coursework in Units 3 and 4 and begin to develop skills in design, implementation, marking, and reporting of SAC tasks;
- Be skilled communicators who can effectively articulate and justify their practices.

#### Values:

- Be flexible and adapt to change through knowing how to learn;
- Be equipped with the skills, motivation and confidence to engage in continuous learning, in order to meet the challenges of a changing world;
- Be aware of generally accepted norms of ethical behaviour in the teaching profession and act in a socially responsible manner in the workplace and other settings;
- Be engaged and socially responsible citizens.

### Content:

Topics may include:

- Specific structure and content in VCE Units 1, 2, 3 and 4 in Biology, Chemistry or Physics;
- Discussion of methodology and teaching techniques in VCE Biology, Chemistry or Physics including course development and assessment issues;
- Further consideration of general issues of assessment at VCE level;
- Examinations in Unit 4 Biology, Chemistry or Physics;
- Visits to schools where practising teachers of Units 2 and 4 in Biology, Chemistry or Physics discuss content, teaching approaches and assessment issues;
- Integration of this course with teaching rounds preparation and post round reviews with individuals.

# **Learning Tasks & Assessment:**

Learning Task	Assessment	Weighting
Preparation of a course for VCE Unit 2 Biology, Chemistry or Physics.	The course will show main areas of	40- 60%
	content, in a sequential manner, together	
	with examples of possible learning	
	activities, knowledge and	
	skills, assessment tasks and uses of	
	information technology.	
School assessed course Work in VCE Unit 4 Biology, Chemistry or Physics.	Full definition of the tasks used to	40- 60%
	measure student level of achievement in	
	SAC exercises, and discussion of issues	
	related to marking of student work.	
Teaching a conceptually difficult content area in Biology, Chemistry or Physics	Identification of a content area which will	15- 20%
Units 1- 4.	be conceptually difficult, planning teaching	
	methods and strategies to address	
	problems, and developing effective	
	student learning	

## **Adopted Reference Style:**

APA