



School of Education

EDST6923

Physics Method 1

Term 1, 2020

3.5 .1	Demonstrate a range of verbal and non-verbal communication strategies to support student engagement.	1, 2, 3
3.6.1	Demonstrate broad knowledge of strategies that can be used to evaluate teaching programs to improve student learning.	2
4.2.1	Demonstrate the capacity to organise classroom activities and provide clear directions.	1, 3
4.4.1	Describe strategies that support students' wellbeing and safety working within school and/or system, curriculum and legislative requirements.	1
6.3.1	Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.	2, 3
7.1.1	Understand and apply the key principles described in codes of ethics and conduct for the teaching profession	2

NATIONAL PRIORITY AREA ELABORATIONS

Priority area		Assessment/s
A. Aboriginal and Torres Strait Islander Education	4, 7	2
B. Classroom Management	1	1, 3
C. Information and Communication Technologies	1, 3, 4, 5, 6, 10, 12	1, 2, 3
D. Literacy and Numeracy	1, 3, 4, 5, 8, 9, 10, 11, 12, 18, 19	1, 2, 3
E.		

4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH

Lectures, tutorials and assignments will cover a variety of approaches to teaching and learning in the Physics classroom. Emphasis will be placed on the relationship between the nature and practice of Physics, the role and value of Physics in society and models of pedagogy for teaching and assessing in Physics. A particular focus will be on strategies that can promote student engagement and achievement in Physics and common student misconceptions.

Student-centered activities will form the basis of the course. These activities will draw on the prior discipline knowledge of the students and will allow them to engage in relevant and challenging experiences that mirror those they will be expected to design for the range of secondary students they will later teach.

5. TEACHING STRATEGIES

Explicit teaching to foster

Additional readings

Anstey, M. & Bull, G. (2006) *Teaching and learning multiliteracies: Changing times, changing literacies*. Curriculum Press, Melbourne.

Attwood, B. (2005), *Telling the truth about Aboriginal history*. All and Unwin, Crows Nest.

Bryson, B. (2004) A Short History of Nearly Everything, Black Swan, London

Finger, G., Russell, G., Jamieson-Proctor, R. & Russell, N. (2006) *Transforming Learning with ICT*

Assessment Details

Assessment Task 1 LESSON PLAN

Plan and design one 60-minute lesson for a Stage 6 class. The lesson plan must follow a standard SED format and be presented using the template provided.

Plan your lesson for a class in a comprehensive high school which would typically include EAL/D students, Indigenous students and students with various religious and cultural backgrounds. Some students may have low levels of literacy. Differentiation strategies to cater for some students are therefore required. Appropriate differentiation strategies are scaffolding, group work and/or an alternative task or mode of presentation.

1. Write a rationale for your lesson plan. Your rationale should address the questions: What do I want the students to learn? Why is it important? What strategies will I use? What assessment for learning strategies will I use to monitor progress?
2. Prepare the lesson plan to demonstrate how you will use appropriate structure, activities, strategies and formative assessment to develop understanding of the material.

Make sure you

- choose an appropriate topic for the year group
- support your rationale using references indicating your professional reading
- choose appropriate outcomes and lesson content

Assessment Task 2 - UNIT OF WORK FOR STAGE 6 PHYSICS

Prepare an outline for a unit of work for a Stage 6 class. The unit of work should cover the first five lessons, which are 80 minutes each; however, you are not preparing full lesson plans.

You must write a rationale for the unit (600-800 words) in which you

- provide a brief outline of the school and class context
- state precisely what you want the students to learn and why it is important
- describe and justify your choice of context to suit the needs and abilities of this class
- justify your teaching strategies by referring to readings, research and material presented in lectures and the Quality Teaching framework
- demonstrate how differentiation will support a diverse range of learners
- describe the prior knowledge students have to begin this unit and discuss how you would assess and build on this prior knowledge.

The unit outline should be in a standard format that will be explained and investigated during lectures and tutorials. You will receive a **template** for the unit outline which you must use.

Your unit of work must have an embedded context and employ a logically sequenced series of lesson outlines, utilising a **variety of teaching strategies**. There should be potential for student engagement with the material taught.

Include:

- syllabus content statements for each lesson
- a description of the activities in each lesson
- one full activity for formative assessment (not an essay)
- one ICT-based activity (not watching a video or PowerPoint presentation)
- one group-work task with a focus on literacy/numeracy (not a mind-map)
- one incursion/excursion/performance/practical activity
- outlines only for the other teaching materials required

The assessment task is to be converted to a PDF with the student name in the title of the file and submitted via Moodle.

NB. ALL OUTCOMES AND CONTENT STATEMENTS MUST BE WRITTEN AS FULL STATEMENTS, ACCOMPANIED BY THEIR IDENTIFYING NUMBER.

UNSW SCHOOL OF EDUCATION
FEEDBACK SHEET
EDST6923 PHYSICS METHOD 1

Student Name:

Student No.

Assessment Task 2 – Unit of Work for Stage 6 Physics

SPECIFIC CRITERIA

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Microteaching Feedback Form for Pre-servi