



School of Education

EDST6953  
Physics Method 2

Term 2 2021



### 1. LOCATION

Faculty of Arts, Designs & Architecture  
School of Education  
EDST6953 Physics Method 2 (6 units of credit)  
Term 2 2021

### 2. STAFF CONTACT DETAILS

Course Coordinator: Oriana Miano  
Email: [o.miano@unsw.edu.au](mailto:o.miano@unsw.edu.au)  
Availability: By appointment  
Tutor: Jennifer Ming  
Email: [j.ming@unsw.edu.au](mailto:j.ming@unsw.edu.au)  
Availability: By appointment

### 3. COURSE DETAILS

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<b>Course Name</b>	Physics Method 2
<b>Credit Points</b>	

## STUDENT LEARNING OUTCOMES

Outcome	
1	Identify essential elements of the NESA Physics Syllabus documents, and strategies to support students as they transition between stages
2	Use strong knowledge of subject content to plan and evaluate coherent, goal-oriented and challenging lessons, lesson sequences and teaching programs which will engage all students
3	Set achievable learning outcomes to match content, teaching strategies, resources and different types of assessment for a unit of work in Physics
4	Provide clear directions to organise and support prepared activities and use resources
5	Assess and report on student learning in Physics to all key stakeholders
6	Identify the characteristics of an effective Physics teacher and the standards of professional practice in teaching, especially the attributes of Graduate teachers

## AUSTRALIAN PROFESSIONAL STANDARDS FOR TEACHERS

Standard	
1.1.1	Demonstrate knowledge and understanding of physical, social and intellectual development and characteristics of students and how these may affect learning
1.2.1	Demonstrate knowledge and understanding of research into how students learn and the implications for teaching
1.3.1	Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistics, cultural, religious and socioeconomic backgrounds
1.5.1	Demonstrate knowledge and understanding of strategies for differentiating teaching to meet the specific learning needs of students across the full range of abilities
2.1.1	Demonstrate knowledge and understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area
2.2.1	Organise content into an effective learning and teaching sequence
2.3.1	Use curriculum, assessment and reporting knowledge to design learning sequences and lesson plans
2.5.1	Know and understand literacy and numeracy teaching strategies and their application in teaching areas
2.6.1	Implement teaching strategies for using ICT to expand curriculum learning opportunities for students
3.1.1	Set learning goals that provide achievable challenges for students of varying characteristics
3.2.1	Plan lesson sequences using knowledge of student learning, content and effective teaching strategies
3.3.1	Include a range of teaching strategies
3.4.1	Demonstrate knowledge of a range of resources including ICT that engage students in their learning
3.6.1	Demonstrate broad knowledge of strategies that can be used to evaluate teaching programs to improve student learning
4.2.1	Demonstrate the capacity to organise classroom activities and provide clear directions
5.1.1	Demonstrate understanding of assessment strategies, including informal and formal, diagnostic, formative and summative approaches to assess student learning
5.2.1	Provide feedback to students on their learning
5.3.1	Make consistent and comparable judgements



#### 4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH

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

Student-centred 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

6.







## **Assessment Details**

### **Assessment 1 (2000 wd eq, 40%)**

**PART 1:** Create a scope and sequence, including learning outcomes, covering the HSC year for a Year 12 Physics class.

**PART 2:** Prepare an assessment task (not an essay) that directly links to the teaching and learning intentions within one term



- provide written feedback for the student which indicates strengths and areas for improvement in relation to this work sample as well as their past performance and overall expectations/standards. Suggest a strategy that will guide the student in his/her learning. (If the task was used summatively you can still use it for formative purposes.)
  - indicate what the implications of your evaluation might be for the teacher in terms of future teaching.
2. Write a few lines that could be included in a mid-year report comment to parents. Provide enough detail to indicate to parents which aspect of the student's performance you are commenting on. Add A, B, C, D or E to align with the advice and work samples provided by NESA and ACARA.

**NOTES:**

**The student work samples must be authentic. They should have been collected during Professional Experience 1 during a normal assessment task and/or provided by the method lecturer. Annotated student work samples, notes and all other written evidence of teacher education students' ability to address Standard 5 to be discussed in class and submitted by the due date.**

**If a student is assessed as Unsatisfactory in the feedback and reporting hurdle requirement, s/he will automatically fail Method 2 overall, and not be permitted to undertake Professional**

UNSW SCHOOL OF EDUCATION  
FEEDBACK SHEET  
EDST6953 PHYSICS METHOD 2

Student Name:

Student No.:

Assessment Task 1: **Scope and sequence for a year with an assessment task (HSC)**

**SPECIFIC CRITERIA**

|(-) —————> (+)|

**Understanding of the question or issue and the key concepts involved**

- Understanding of syllabus requirements regarding literacy, numeracy and the

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UNSW SCHOOL OF EDUCATION  
 FEEDBACK SHEET  
 EDST6953 PHYSICS METHOD 2

Student Name:

Student No.:

Assessment Task 2: **Planning a unit of work including formative assessment strategies**

<b>SPECIFIC CRITERIA</b>	(-) <span style="font-size: 1.5em;">→</span> (+)					
<p><b>Understanding of the question or issue and the key concepts involved</b></p> <ul style="list-style-type: none"> <li>• Understands the task and its relationship to relevant areas of theory, research and practice</li> <li>• Uses syllabus documents and terminology clearly and accurately</li> <li>• Sequences tasks and activities to suit logical learning progression</li> <li>• Integrates assessment task logically with learning intentions and learning sequence</li> <li>• Provides effective formative feedback for student sample</li> </ul>	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; height: 100px;"></td> <td style="width: 20%; height: 100px;"></td> <td style="width: 20%; height: 100px;"></td> <td style="width: 20%; height: 100px;"></td> <td style="width: 20%; height: 100px;"></td> </tr> </table>					

Assessment, Feedback and Reporting

STUDENT TEACHER

Name:

zID:

Date:

Details

Method