

# School of Education

## EDST6954 Earth and Environmental Science Method 2

Term 2, 2019

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STUDENT LEARNING OUTCOMES

STUDENT	LEARNING OUTCOMES
Outcome	
1	Identify essential elements of the NESA Earth and Environmental Science Syllabus,
I	and strategies to support students as they transition between stages
	Use strong knowledge of
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5.3.1	Make consistent and comparable judgements
E 4 1	Demonstrate the capacity to interpret student assessment data to evaluate student
5.4.1	learning and modify teaching practice
5.5.1	Report on student achievement
631	Seek and apply constructive feedback from supervisors and teachers to improve
0.0.1	teaching practices.
7.1.1	Understand and apply the key principles described in codes of ethics and conduct for
	the teaching profession

#### 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 Earth and Environmental Science 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 Earth and Environmental Science.

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 they will later teach.

#### 5. TEACHING STRATEGIES

Explicit teaching, including lectures, to foster

- approaches to learning and the use of a range of teaching strategies to foster interest and support learning
- Small group cooperative learning to understand the importance of teamwork in an educational context and to demonstrate the use of group structures as appropriate to address teaching and learning goals
- Structured occasions for reflection on learning to allow students to reflect critically on and improve teaching practice
- Extensive opportunities for whole group and small group dialogue and discussion, allowing students the opportunity to demonstrate their capacity to communicate and liaise with the diverse members of an education community, and to demonstrate their knowledge and understanding of method content.
- Online learning from readings on the Moodle website and online discussions In tutorials, students will be expected to work in small groups to develop diverse products such as narratives, contexts, sections of units of work, lesson plans, teaching resources, and assessment tasks. Each group will be expected to upload and share their work in progress to Moodle. This work will be monitored by the tutors, and contribute to the total grade for each student. Students who are absent on the day, but who still wish to submit their tutorial work can email it to their tutor the next day only. A debriefing session will be conducted 15 minutes prior to the end of each tutorial.

These activities will occur in a classroom climate that is su g0 G[s)-5l 71.81 2 9.9641.92 0008866 021a5541.92 001 Tu

#### 6. COURSE CONTENT AND STRUCTURE

Module Lecture

#### 7. RESOURCES

#### **Required Readings**

Each student is required to obtain from the NESA website the following documents: *NSW Stage 6 Earth and Environmental Science Syllabus* and Stage 6 Support Materials https://syllabus.nesa.nsw.edu.au/earth-

#### 8. ASSESSMENT

Student

Assessment Task Length

Weight

#### **Assessment Details**

#### Assessment 1 (2 000 wd eq, 40%)

**PART 1**: Create a scope and sequence, including learning outcomes, covering 10 weeks for a Year 11 preliminary class.

PART 2: Prepare an assessment task (not an essay) that directly links to the teaching and learning

how the feedback form the summative task can also be used for formative assessment. Make sure your instructions for the task are grammatically correct and communicate effectively for students.

Design a marking rubric, which also includes space for a holistic comment.

Provide an exemplar student answer for the assessment task. Write a feedback comment for this response outlining its strengths and indicating at least one

#### HURDLE REQUIREMENT

#### FEEDBACK AND REPORTING

Assessment is the process of gathering evidence from a variety of sources about learning outcomes and being able to use that information to improve learning and teaching. Evidence includes not only individual student work samples and test results, but also more global data derived from standardized tests (eg NAPLAN, ICAS, HSC etc) as well as more qualitative information generated from student self and peer evaluations, and student-parent conferences.

Feedback is a structured interaction with the student about their current learning: where they are, where they want and /or need to be and how to get there. It may be in oral or written form and may be -assessment. Feedback needs to

indicate learning that has been demonstrated (achieved) as well as what needs more work. For the feedback to also feed forward, comments need to provide students with strategies to guide their improvement. Feedback /reporting to and for parents is also important as they are critical stakeholders

Moderation is a process used by teachers to compare their judgements about student performance so that assessment is trustworthy. Teachers work together as a group to ensure that the way they use assessment grades is consistent with agreed or published standards. For A to E grades this means the grade a student receives in one school can be fairly compared to the same grade anywhere in NSW. For school-based tasks, it means the work of students in different classes can be assessed using the same success criteria to evaluate progress toward learning outcomes.

View some work samples that teachers in your subject area have aligned to grades A to E at NESA or <u>ACARA</u> workshops.

It is recommended that students read widely on how to design appropriate assessment tasks, how moderate student samples of work and how to provide effective feedback. Tutorial time will be allocated to discussing this aspect of professional competence and providing experience with the moderation and feedback process

The assessment process consists of two components.

1. A collection of five or six authentic student responses to preferably two assessment tasks. The responses may be written, visual or oral. The number depends on the length of the response. For each text

ensure anonymity by removing student names and destroying the samples at the end of the course.

include the instructions that were given for the assessment task and indicate whether the task was intended for formative purposes or summative <u>and</u> formative purposes

annotate the task to indicate what worked well and what needs changing if it were to be used again

include the assessment criteria and/or marking scheme/rubric for each task

provide annotations (with time codes if your sample is audio- or video-based) to indicate what the student has demonstrated as areas of strength and areas that need to be developed further in relation to the task

include a key for marking symbols

find out what the general expectation and/or current standards of the school/system are in relation to this subject area/topic/skill by consulting published NAPLAN/HSC/other relevant data, as well as talking to teachers, and consider

where this student work is in relation to those overall expectations/standards as well in relation to their previous performance

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

#### UNSW SCHOOL OF EDUCATION FEEDBACK SHEET EDST6954 EARTH AND ENVIRONMENTAL SCIENCE METHOD 2

Student Name:

Student No.:

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Assessment Task 1: Scope and Sequence with Assessment Task for one term (preliminary)

### SPECIFIC CRITERIA

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

Understands the task and its relationship to relevant areas of theory, research and practice

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#### UNSW SCHOOL OF EDUCATION FEEDBACK SHEET EDST6954 EARTH AND ENVIRONMENTAL SCIENCE METHOD 2

Student No.:

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

SPECIFIC CRITERIA	(-) —			>	• (+)
Understanding of the question or issue and the key concepts involved					
Demonstrates knowledge of selected Stage 6 course and syllabus outcomes Sequences tasks and activities to suit logical learning progression and meet selected outcomes for Year 12					
Integrates formative assessment strategies throughout the unit of work					
Depth of evidence in response to the task					
Demonstrates understanding of academic and cultural diversity Includes a variety of pedagogical strategies to suit content of the Stage 6 course					
Designs appropriate activities and outlines lessons in sufficient detail without providing full plans					
Provides effective feedback opportunities to inform students of their progress					
Familiarity with and relevance of professional and/or research literature used to support response					
Demonstrates understanding of the need to differentiate lessons to cater for diverse learners					
Understanding of a range of effective assessment practices					
Structure and organisation or response					
Demonstrates ability to plan using backward mapping to meet selected outcomes					
Presentation of effective and engaging learning sequence					
Presentation of response according to appropriate academic and linguistic	1 1	I	I	I I	

conventions

Student Name:

Writes using correct Standard Australian English



Asses	ssment, Feedback and Reporting				
STUDEN	T TEACHER				
Name:		zID:		Date:	
Details					
Method			Topic/level		
AITSL Standard 5					