# TEAC 7003 ADDRESSING DIVERSITY IN SCIENCE TEACHING AND LEARNING

#### Credit Points 10

Legacy Code 102486

**Coordinator** Karina Mckoy (https://directory.westernsydney.edu.au/ search/name/Karina Mckoy/)

**Description** The purpose of this unit is for students to develop knowledge of science teaching for primary aged children of science with additional needs and diverse linguistic and cultural backgrounds. Students will explore a range of needs, including gender issues with science learning, EAL/D backgrounds, learning difficulties, and gifted and talented abilities, and identify strategies to respond to those needs with specific instructional plans. In addition, students will learn to implement culturally relevant and context-based pedagogies in primary science education.

#### School Education

Discipline Teacher Education: Primary

#### Student Contribution Band HECS Band 1 10cp

Check your HECS Band contribution amount via the Fees (https:// www.westernsydney.edu.au/currentstudents/current\_students/fees/) page.

Level Postgraduate Coursework Level 7 subject

#### Restrictions

Students must be enrolled in 1845 Graduate Certificate in Primary Science Education.

#### Assumed Knowledge

A basic understanding of differentiated instruction, features of positive classroom environments, and outcomes of the primary science syllabus is desirable.

### **Learning Outcomes**

On successful completion of this subject, students should be able to:

- 1. Evaluate the role of academic, social, economic, cultural, and linguistic considerations for teaching primary science
- 2. Critique the relationships among teachers f worldview of diversity and disability, students f experiences and backgrounds, and the learning context to generate implications for future practice
- 3. Differentiate plans for primary science instruction based on primary students tearning needs
- 4. Design culturally relevant pedagogies into primary science instruction
- 5. Apply appropriate context-based pedagogies into primary science instruction

## Subject Content

1. Constructing knowledge of academic, social, economic, cultural, and linguistic considerations for teaching primary science

2. Critiquing the relationships among teachers?f worldviews of diversity and disability, children?fs experiences and backgrounds, and the learning context to generate implications for future practice

- 3. Differentiating primary science instruction based on students?f needs
- 4. Culturally relevant science pedagogy
- 5. Context-based pedagogies in primary science

### Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

ltem	Length	Percent	Threshold	Individual/ Group Task
Literature Review – Evaluate current research on teaching primary science in diverse and inclusive contests	2,000 words	50	Ν	Individual
Professional Task – Differentiate a primary science unit to respond to students' learning needs	2,000 words	50	Ν	Individual

Teaching Periods

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