

TEAC 1039 SCIENTIST, ARTIST, TEACHER

Credit Points 10

Legacy Code 102821

Coordinator Karin Mackay ([https://directory.westernsydney.edu.au/search/name/Karin Mackay/](https://directory.westernsydney.edu.au/search/name/Karin%20Mackay/))

Description This unit is designed to develop pre-service teachers' efficacy and identities in the content area of science and the arts. Building on the concepts of teaching-artists and scientist-as-teacher this unit gives future teachers agency to create innovative and transformative learning experiences for the primary classroom. In this unit students build on their content knowledge in science and the arts, as developed in the units Science and Technology in the Primary Years, and Creative Arts Education. They will develop science, performing arts (dance, drama and music), visual arts and media arts skills which can enhance their repertoire for the classroom. This unit will additionally explore the intersection of science and the arts, developing knowledge of creativity, aesthetics, innovation, artistic and scientific processes. It has been designed to give all students the opportunity to develop their knowledge, understanding, skills, confidence and competence in the science and the arts in discrete and integrated forms.

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 Undergraduate Level 1 subject

Restrictions Students must be enrolled in 1876 Bachelor of Education (Primary).

Learning Outcomes

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

1. Demonstrate an understanding of Science and Arts in the context of the Primary classroom, including theories, philosophies and practices that underpin them;
2. Research, reflect on and critically analyse the importance of Science, the Arts and their integration in the holistic development of children and their role in building innovation and skills for the future.
3. Exhibit competencies in a range of skills and knowledge in Science, Performing Arts (Dance, Drama and Music), Visual Arts and Media that can be translated effectively to the primary context.
4. Articulate the ways that scientific and artistic knowledge and skills contribute to teacher identity and efficacy in teaching Science and the Arts.
5. Integrate Science and the Arts, through exploration of collaborative learning processes, experimentation, innovation, imagination, creativity and problem-based learning.
6. Use physical and digital technologies to exhibit practical skills in Science and the Arts.

Subject Content

1. Theory, principles and practices related to Science and Arts education, for example, working scientifically and artistically, using

- collaborative learning processes, experimentation, innovation, imagination, creativity and problem-based learning;
2. Research the importance of Science and the Arts in the holistic development of primary-aged students and its role in building innovation and skills for the future
 3. Development of identities and efficacy of teaching-scientist and teaching-artist;
 4. Ways of integrating working scientifically and artistically
 5. Using physical and digital technologies to exhibit practical skills in Science and the Arts
 6. Concepts pervasive in sciences and the arts, for example colour, shadows, music, rhythmic body movement, landforms, shapes

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.

Item	Length	Percent	Threshold	Individual/ Group Task
Quiz	30 multiple choice questions	30	N	Individual
Reflection	1,200 words	40	N	Individual
Presentation	3-8 minute performance	30	N	Individual

Prescribed Texts

- Skamp, K., & Preston, C. M. (Eds.). (2017). Teaching primary science constructively (6th ed.). South Melbourne, Australia: Cengage Learning.
- Wilkin, K. and Petrich, M. (2014). The Art of Tinkering, San Francisco: Weldon Owen
- Hewitt, P., Lyons, S., Suchocki, J. & Yeh, J. (2013). Conceptual Integrated Science (3rd ed.). Pearson

Teaching Periods

Spring

Bankstown

Day

Subject Contact Karin Mackay ([https://directory.westernsydney.edu.au/search/name/Karin Mackay/](https://directory.westernsydney.edu.au/search/name/Karin%20Mackay/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC1039_22-SPR_BA_D#subjects)