TEAC 3041 SCIENCE AND TECHNOLOGY 2

Credit Points 10

Legacy Code 102753

Coordinator Kay Carroll (https://directory.westernsydney.edu.au/search/name/Kay Carroll/)

Description The subject is only offered to students enrolled in the Bachelor of Education (Primary) Aboriginal and Torres Strait Islander Education program. This subject is designed to enhance prior work in the science and technology areas with a particular focus on the primary years: 3 – 6. The significance of children's views is emphasised in the selection, design and sequencing of activities for primary students in science and technology experiences through the four content areas: Biological sciences, Chemical sciences, Earth and Space sciences and the Physical sciences. Emphasis will be given to Aboriginal and Torres Strait Islander science elaborations and to develop authentic locally driven, land based teaching of content and classroom resources.

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 3 subject

Restrictions

Students must be enrolled in 1717 Bachelor of Education (Primary) Aboriginal and Torres Strait Islander Education.

Learning Outcomes

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

1. Demonstrate key Aboriginal land based content knowledge in the areas of Biological sciences, Chemical sciences, Earth and space sciences and the Physical sciences (Standard 2.1.1, 2.4.1) [CLO 1, 2, 3].
2. Plan lessons, lesson sequences and assessment items that engage and motivate students in science and technology. (Standard 2.2.1, 2.3.1, 3.1.1, 3.2.1, 3.6.1, 5.4.1) [CLO 1,2,3,4,5,7].
3. Articulate clear learning goals in preparing learning experiences for science and technology education that are appropriate for the cognitive, social and language abilities of students in years 3 – 6. (Standard 1.3.1, 1.4.1, 1.5.1, 5.1.1) [CLO 1,2,4,5,7].
4. Demonstrate proficiency with the content knowledge, pedagogical content knowledge and legislation appropriate to support learning in primary classrooms (years 3-6) (Standard 1.2.1, 1.6.1, 2.1.1, 2.5.1, 3.1.1, 3.6.1, 7.2.1).
5. Design learning experiences, lessons and lesson sequences that integrate the Australian curriculum's general capabilities into science and technology. (Standard 1.5.1, 2.5.1, 2.6.1, 4.1.1, 4.2.1) [CLO 1,2,3,4,5,6,8]

Subject Content

1. Knowledge, skills, values and attitudes necessary to cultivate interest and positive, informed ethical values, attitudes, and student self-efficacy in the sciences for students in Years 3 – 6.
2. The distinctive nature of scientific inquiry as it relates to the Aboriginal and Torres Strait Islander science elaborations.
3. Local knowledge sources and how they underpin pedagogies of teaching and learning science, and teaching and learning technology (design and digital).
4. Strategies for teaching and assessing Primary Science and Technology with a focus on the development of skills for practical problem and project-based learning that is student driven and /or student directed for students in Years 3 – 6.
5. Knowledge and understanding of the use and selection of digital technologies to support teaching and learning in Primary Science and Technology;
6. Supporting students with disabilities to access the Primary Science and Technology curriculum and demonstrate achievement;
7. Content requirements for the teaching of Biological sciences, Chemical sciences, Earth and Space sciences and the Physical sciences, for students in Years 3 – 6.
8. Knowledge and understanding of the Australian Curriculum's general capabilities.

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.

Type	Length	Percent	Threshold	Individual/ Group Task
Professional Task	1,500 words	40	N	Individual
Portfolio	2,000 words	60	N	Individual

Prescribed Texts

- Skamp, K., & Preston, Christine Margaret, editor. (2018). Teaching primary science constructively (6th ed.).
- NSW Syllabus for the Australian Curriculum: Science K-10 (incorporating Science and Technology K-6) Retrieved from http://syllabus.bos.nsw.edu.au/

Teaching Periods

2nd Half (2022)

Bankstown

Day

Subject Contact Kay Carroll (https://directory.westernsydney.edu.au/search/name/Kay Carroll/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC3041_22-2H_BA_D#subjects)

Spring (2023)

Bankstown City

On-site

Subject Contact Kay Carroll (https://directory.westernsydney.edu.au/search/name/Kay Carroll/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=TEAC3041_23-SPR_BK_1#subjects)