# TEAC 5039 TECHNOLOGY CURRICULUM 4

**Credit Points 10** 

Legacy Code 102884

Coordinator Adam Watson (https://directory.westernsydney.edu.au/search/name/Adam Watson/)

Description In this subject, the place of Technology Curricula in senior secondary will be further explored using evidence-based approaches for curriculum development and alignment and to plan for effective teaching and learning, including formative and summative assessment. Pre-service teachers will learn approaches for teaching a range of Technologies and how to provide constructive feedback and reporting connected to project and problem-based learning. The subject will demonstrate approaches for engaging diverse senior secondary learners. Pre-service teachers will develop subject and assessment plans and demonstrate a knowledge of curriculum, learning and assessment theory. The subject requires students to develop original portfolio of teaching artefacts that demonstrate capacity to create and critique resources for effective teaching and learning in Technology.

**School** Education

Discipline Teacher Education: Secondary

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 5 subject

Pre-requisite(s) TEAC 7027 AND TEAC 7004 AND TEAC 7032

#### Restrictions

Students in program 1714 or 1848 must have a relevant Technology Curriculum Area applied to their student record before they can enrol in this subject. Students can view their Curriculum Areas on DegreeWorks in MySR.

### **Learning Outcomes**

- Generate and critically evaluate a Technologies curriculum program for senior students which synthesises a variety of pedagogical approaches and resources appropriate to these year levels, assessment tasks and curriculum content.
- Critically analyse and develop a variety of research-informed classroom strategies which cater for individual differences in student learning in the classroom.
- 3. Demonstrate understanding of Aboriginal and/or Torres Strait Islander design solutions in Technology and the impact of historical and contemporary design solutions surrounding Indigenous cultural and intellectual property.
- 4. Evaluate the relationship between learning task design, student learning and expertise, higher order thinking, assessment, feedback and reporting strategies and evaluation in Technology Education.
- Present well-constructed, innovative and coherent Stage 6 STEM based student-centred lessons that include literacy (including key metalanguage) and numeracy, enhance thinking and ICT skills and

- which take into account the full range of students' abilities and school-based and system data.
- Prepare a suitable range of senior assessment instruments that use valid, reliable and consistent judgements of student learning.
- 7. Design and select innovative STEM and problem based teaching resources that apply a critically reflective approach to teaching arrange of Technologies and develop students critical and creative capabilities in the senior years of schooling.
- 8. Reflect and research professional learning to develop the discipline of Technology teaching.

### **Subject Content**

- 1. What is the nature of Technology in the senior years of secondary education? How is the subject linked to what is taught in the junior and middle years of secondary education?
- 2. How are current educational policies and priorities addressed with particular reference to Aboriginal and Torres Strait Islander education, literacy and numeracy and ICT, in the teaching of the subject?
- 3. How can we explore Aboriginal and/or Torres Strait Islander design solutions in Technology?
- 4. How can we investigate the impact of historical and contemporary design solutions and understand ethical responsibilities surrounding Indigenous cultural and intellectual property?
- 5. In what ways do active and engaging, student-centred teaching practices characterise the subject?
- 6. Why is an understanding of socio-cultural and pedagogical theories and approaches important to quality teaching in the subject?
- 7. How are lessons planned, units written and learning scoped and sequenced in the subject?
- 8. Why is it necessary to continue to differentiate teaching in the subject in the senior years of secondary education? How do teachers go about differentiation?
- 9. How do teachers keep students safe during teaching in the subject?
- 10. How may the incorporation of visionary and innovative uses of ICT, critical and creative thinking and problem solving support the achievement of quality learning outcomes in the subject?
- 11. How can assessment of learning, assessment for learning and assessment as learning be reconciled in teaching Technologies?
- 12. What records do teachers keep? How are those records used in reporting student performance at the HSC and for awarding the Record of Student Achievement (ROSA)?
- 13. In what ways has educational research contributed to the teaching and student learning of the Technology?

#### 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.

Туре	Length	Percent	Threshold	Individual/ Group Task
Professional Task	2000 Words	50	N	Individual
Portfolio	2000 Words (Portfolio)	50	N	Individual

**Prescribed Texts** 

New South Wales Standards Authority [NESA]. (2013) Technology Stage 6 Syllabuses. (https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/technologies/)

**Teaching Periods** 

# Spring (2022) Penrith (Kingswood)

Day

Subject Contact Adam Watson (https://directory.westernsydney.edu.au/search/name/Adam Watson/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=TEAC5039\_22-SPR\_KW\_D#subjects)

# Spring (2023) Penrith (Kingswood)

On-site

Subject Contact Adam Watson (https://directory.westernsydney.edu.au/search/name/Adam Watson/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=TEAC5039\_23-SPR\_KW\_1#subjects)