

EDU780 Teaching Technologies: Curriculum and Pedagogy

School: School of Education and Tertiary Access

2022 | Semester 2

UniSC Sunshine Coast

**BLENDED
LEARNING**

Most of your course is on campus but you may be able to do some components of this course online.

Please go to usc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course introduces you to the technologies discipline area and technologies across the curriculum. You will evaluate traditional, contemporary and emerging technologies for teaching and learning with primary students. You will engage in critical and creative thinking, including understanding interrelationships in systems when solving complex problems. You will make informed and ethical decisions about the role, impact and use of technologies in the economy, environment and society for a sustainable future.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Tutorial/Workshop 1 – The tutorial requires on-campus engagement in hands-on activities using a range of technologies and materials to support learning how to apply the design process.	2hrs	Week 1	10 times
Independent Study/Research – You are required to engage in self-directed learning using the Canvas course modules, associated activities, current research/reading via USC library databases and the required textbooks and resources.	2hrs	Week 1	10 times

1.3. Course Topics

- Design and Technologies Curriculum
- Technology and society
- Engineering principles and systems
- Food and fibre production and food specialisations
- Materials and technologies specialisation
- Design solutions
- Digital Technologies
- Digital systems
- Representation of data
- Cybersafety and ethical issues
- Digital communications

2. What level is this course?

700 Level (Specialised)

Demonstrating a specialised body of knowledge and set of skills for professional practice or further learning. Advanced application of knowledge and skills in unfamiliar contexts.

3. What is the unit value of this course?

6 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	Australian Institute for Teaching and School Leadership
1 Demonstrate implementation of effective learning within Design and Technologies and Digital Technologies for primary schools by critically evaluating learning theories, teaching frameworks, Australian Curriculum content, pedagogy and resources in a cross-curriculum capacity. Analyse and reflect on ethical and personal teaching knowledge and skills.	Knowledgeable Ethical	1.1, 1.2, 3.6, 4.5, 6.1, 6.2, 6.3, 6.4, 7.4
2 Implement teaching strategies and learning activities using technologies suitable for early childhood and primary school students that integrate literacy, numeracy, legislative, administrative and ethical considerations.	Knowledgeable Creative and critical thinker	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7

* Competencies by Professional Body

CODE	COMPETENCY
AUSTRALIAN INSTITUTE FOR TEACHING AND SCHOOL LEADERSHIP	
1.1	Physical, social and intellectual development and characteristics of students: Demonstrate knowledge and understanding of physical, social and intellectual development and characteristics of students and how these may affect learning.
1.2	Understand how students learn: Demonstrate knowledge and understanding of research into how students learn and the implications for teaching.
2.1	Content and teaching strategies of the teaching area: Demonstrate knowledge and understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area
2.2	Content selection and organisation: Organise content into an effective learning and teaching sequence.
2.3	Curriculum, assessment and reporting: Use curriculum, assessment and reporting knowledge to design learning sequences and lesson plans.
2.4	Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous and non-Indigenous Australians: Demonstrate broad knowledge of, understanding of and respect for Aboriginal and Torres Strait Islander histories, cultures and languages.
2.5	Literacy and numeracy strategies: Know and understand literacy and numeracy teaching strategies and their application in teaching areas.
2.6	Information and Communication Technology (ICT): Implement teaching strategies for using ICT to expand curriculum learning opportunities for students.
3.1	Establish challenging learning goals: Set learning goals that provide achievable challenges for students of varying abilities and characteristics.

CODE	COMPETENCY
3.2	Plan, structure and sequence learning programs: Plan lesson sequences using knowledge of student learning, content and effective teaching strategies.
3.3	Use teaching strategies: Include a range of teaching strategies.
3.4	Select and use resources: Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning.
3.5	Use effective classroom communication: Demonstrate a range of verbal and non-verbal communication strategies to support student engagement
3.6	Evaluate and improve teaching programs: Demonstrate broad knowledge of strategies that can be used to evaluate teaching programs to improve student learning.
3.7	Engage parents/carers in the educative process: Describe a broad range of strategies for involving parents/carers in the educative process.
4.5	Use ICT safely, responsibly and ethically: Demonstrate an understanding of the relevant issues and the strategies available to support the safe, responsible and ethical use of ICT in learning and teaching.
6.1	Identify and plan professional learning needs: Demonstrate an understanding of the role of the Australian Professional Standards for Teachers in identifying professional learning needs.
6.2	Engage in professional learning and improve practice: Understand the relevant and appropriate sources of professional learning for teachers
6.3	Engage with colleagues and improve practice: Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.
6.4	Apply professional learning and improve student learning: Demonstrate an understanding of the rationale for continued professional learning and the implications for improved student learning.
7.4	Engage with professional teaching networks and broader communities: Understand the role of external professionals and community representatives in broadening teachers' professional knowledge and practice.

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of "pre-requisites, co-requisites and anti-requisites".

5.1. Pre-requisites

Enrolled in Program ED707

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

Students will be provided academic progress feedback during the first third of the teaching semester. This feedback will be provided during the tutorials through group and individual discussion activities up to the delivery of the first assessment task.

The tasks in the course will be completed with a focus on your chosen specialisation and other integrated components as required by the Course Coordinator.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Artefact - Creative, and Oral	Individual	20%	10 minute media video presentation	Week 5	Online Submission
All	2	Journal	Individual	40%	Completion of the workbook activities (approx 1500 words)	Week 7	Online ePortfolio Submission
All	3	Written Piece	Group	40%	Sequence of 6 lessons written on approved lesson plan template (approx 2000 words) and written rationale (750 words).	Week 10	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Media video presentation

GOAL:	The goal of this task is to demonstrate your understanding of digital citizenship, which includes cyber safety, cyber ethics and cyber bullying, in the context of the teaching profession through designing a professional development presentation.					
PRODUCT:	Artefact - Creative, and Oral					
FORMAT:	You are being asked to design and create a 10-minute media video presentation for your teacher colleagues; for example, to be presented at a staff meeting. The media presentation is to cover: 1) cyber safety, 2) cyber ethics, 3) cyber bullying, 4) their potential risks from a personal and professional and legislative lens, and 5) your future students' physical safety and emotional safety in the absence of responsible digital citizenship behaviour, both inside and outside the school environment.					
CRITERIA:	No.					Learning Outcome assessed
	1	Applied knowledge of the concepts, substance and structure of the Australian Curriculum: Technologies and integration with other learning areas when teaching students about digital citizenship, cyber safety, cyber ethics and cyber bullying.				1 2
	2	Justification of selection of relevant examples and resources to support your students learning about cyber safety, cyber ethic and cyber bullying.				2
	3	Synthesis of credible literature associated with digital citizenship surrounding a teacher's personal profile and digital footprint from a moral and ethical perspective as well as from a governmentally legislative stance.				2
	4	Production and design of a video with clear verbal and written narration, written communication skills and academic literacies including grammar, English expression, APA7 referencing conventions and technical accuracy.				2

All - Assessment Task 2: Critical reflection journal

GOAL:	The goal of this task is to document the design process and evidence the completion of artefacts for five design challenges. Demonstrating your knowledge of the concepts, substance and structure of both of the Technologies subjects.																
PRODUCT:	Journal																
FORMAT:	Using a workbook provided in PebblePad, you will build an e-portfolio which documents your understanding of Technologies curriculum and pedagogies. Each week in your folio (weeks 1-7) you will complete the activities and engage in reflection to demonstrate your developing knowledge of the design process. In tutorials you will be assigned design briefs which you will collaboratively design a solution for by applying design and systems thinking and design processes to investigate ideas, generate and refine ideas, plan, produce and evaluate designed solutions. The design process for each design brief will need to be documented in your workbook. In week one you will need to submit your workbook so that ongoing formative feedback can be provided on your progress prior to the final submission date.																
CRITERIA:	<table><tr><th>No.</th><th></th><th>Learning Outcome assessed</th></tr><tr><td>1</td><td>Critically analyse and reflect on own experiences and understandings of teaching technologies in a reflection folio.</td><td>1</td></tr><tr><td>2</td><td>Apply knowledge of design and systems thinking and design processes via reflections on completed design challenges</td><td>1</td></tr><tr><td>3</td><td>Apply knowledge of the concepts, substance and structure of the Technologies subject areas.</td><td>1</td></tr><tr><td>4</td><td>Apply written communication skills and academic literacies including English expression grammar, spelling, punctuation, and reference academic sources in the field of Technologies using APA7 referencing conventions.</td><td>1</td></tr></table>	No.		Learning Outcome assessed	1	Critically analyse and reflect on own experiences and understandings of teaching technologies in a reflection folio.	1	2	Apply knowledge of design and systems thinking and design processes via reflections on completed design challenges	1	3	Apply knowledge of the concepts, substance and structure of the Technologies subject areas.	1	4	Apply written communication skills and academic literacies including English expression grammar, spelling, punctuation, and reference academic sources in the field of Technologies using APA7 referencing conventions.	1	
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3	Apply knowledge of the concepts, substance and structure of the Technologies subject areas.	1															
4	Apply written communication skills and academic literacies including English expression grammar, spelling, punctuation, and reference academic sources in the field of Technologies using APA7 referencing conventions.	1															

All - Assessment Task 3: Teaching and Learning Sequence of Lessons with Rationale

GOAL:	The goal of this task is to demonstrate knowledge of the Australian Curriculum: Design and Technologies subject, and technological, pedagogical and content knowledge, through creation of a Design Challenge sequence of lessons for primary school students, based on the Design Process. .	
PRODUCT:	Written Piece	
FORMAT:	<p>This is a partnered task - you and your partner will be assigned a technologies topic and context for the design challenge.</p> <p>You and your partner are to design and develop a written sequence of 6 lessons, appropriate to a primary school-year level from Prep to Year 6. The teaching sequence is to derive from the Design and Technologies subject of the Australian Curriculum: Technologies and integrate with other curriculum areas, including the general capabilities. The sequence of lessons will use a problem-based learning approach whereby, the primary school-aged students collaboratively apply design and systems thinking and design processes to investigate ideas, generate and refine ideas, plan, produce and evaluate designed solutions for an identified authentic need. Consideration should be given to appropriateness and authenticity to the age group, collaboration between the students, lesson sequence and appropriate alignment between the curriculum outcomes, lesson's objective(s) and the assessment(s). Consideration should also be given to curriculum alignment, cross curriculum priorities and any general capabilities that are met with the design challenge activity, including literacy and numeracy in your specialisation learning area.</p>	

CRITERIA:	No.	Learning Outcome assessed
	1	Applied knowledge and understanding of the Technologies curriculum including alignment of curriculum, lesson objectives, learning activities and assessment. 1
	2	Sequenced innovative Design Challenge for students in primary school with a design brief linked to solving a real-life problem using a problem-based learning approach. 2
	3	Demonstration of age-appropriate pedagogy, resources and materials for teaching technologies and identification of safety requirements and ethical considerations 2
	4	Demonstrate written communication skills and academic literacies including English expression grammar, spelling, punctuation, APA referencing conventions. Group collaboration and individual effort. 1

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
Week 1	The future of work - technologies and society
Week 2	The Australian Curriculum Technologies
Week 3	STEM in the Curriculum
Week 4	Food and fibre production
Week 5	Food Specialisations
Week 6	Digital Systems
Week 7	Data representation
Week 8	Backward design and the Technology Curriculum's design process
Week 9	Pedagogies and planning for Technologies education
Week 10	Current and emerging technologies

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Required	Peter Albion, Coral Campbell	2018	Technologies Education for the Primary Years	n/a	Cengage AU
Required	Howell, J., & McMaster, N.	2022	Teaching with Technologies: Pedagogies for collaboration, communication, and creativity	n/a	Oxford University Press

8.2. Specific requirements

It is the students' responsibility to attend classes and keep up with the course readings and other preparatory activities. Any equipment required for the tutorial presentation is up to the student to source.

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.

- 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.

- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email studentwellbeing@usc.edu.au.

10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.8. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.9. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.10. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au