School of Education

EDUC4245: Specialist Studies in Technology 4

Callaghan
Semester 1 - 2023

COURSE OUTLINE

OVERVIEW

Course Description

This course provides an introduction to curriculum, pedagogy and assessment and NESA requirements for teaching Stage 6 Technology Syllabi. It provides students with an opportunity to understand the various discourses on current issues that inform teachers' knowledge and pedagogical practice, as well as critically engaging with models of pedagogy.

Requisites

For students who commenced in the program in 2016 onwards, enrolment in this course is dependent on successful completion of the teacher education admission milestone:
- Three HSC band 5s (including one in English) or
- 80 units of UON courses or
- Regulatory authority approved comparable pathways.

If you have successfully completed EDUC3031 you cannot enrol in this course.

Assumed Knowledge

Students should have completed EDUC1101 and EDUC2145. It is expected that in EDUC1101 they would have enrolled in the Design and Technology tutorial.

Contact Hours

Callaghan
Lecture
Online
8 hour(s) per Term Full Term starting Week 1

Tutorial
Face to Face On Campus
16 hour(s) per Term Full Term starting Week 1

Workshop
Face to Face On Campus
12 hour(s) per Term Full Term starting Week 2
Note: Workshops may be conducted on a weekly basis or grouped in multiple day-long or half-day intensives, possibly on a weekend or during semester break.

Unit Weighting

10

Workload

Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

CONTACTS

Course Coordinator

Callaghan
Ms Vicki McCudden
Vicki.McCudden@newcastle.edu.au
Consultation: Please email for an appointment.

Teaching Staff

Other teaching staff will be advised on the course Canvas site.

School Office

School of Education
V Building
Callaghan
Education@newcastle.edu.au
+61 2 4921 6428

SYLLABUS

Course Content

This course introduces students to:

Curriculum

- Stage 6 Technology syllabi
- Planning Lessons, Programming/Unit of Work/Resources

Pedagogy

- Contemporary approaches to pedagogy (incl. the NSW Quality Teaching framework).
- Academic culture, literacy and numeracy issues.
- Problem Based Learning, Design, Communication, Research, Innovation, Emerging Technologies, Sustainability, Evaluation.
- Professional Affiliates: TEA, IIATE, NSW Institute of Teachers, TEA. DECA, HEA, HHEA.
- Teaching Strategies including: Autonomous Learning Model, Case Study, Industry Studies, Oral Presentations, Research, Discourse and Mentoring.

Assessment

- Scope and Sequence
- New HSC Assessment Requirements
- Whole School Assessment
- Using SMART and Scout Data to analyse HSC results.
- Using formative and summative data
- Stage 6 Specific Technology Subject Assessment Requirements
- HSC assessment and examination
- Oral and Written reports

Skills

- Major Project and Folio Management

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Design challenging, engaging, and supportive scope and sequence and units for teaching the Stage 6 Technology curriculum of their first and/or second teaching areas.

2. Utilise appropriate pedagogies, resources, and assessment practices for teaching Stage 6 Technology

3. Understand the assessment requirements of the NSW Higher School Certificate.

4. Understand issues involved in managing and supervising senior technology projects.

Course Materials

Required Reading:

- *Stage 6 Design and Technology Syllabus (electronic or hard copy)
- *Stage 6 Technology Education Elective Syllabus (Electronic or hard copy.
- *Bower, Matt. (2017) "Design of Technology-enhanced Learning: Integrating Research and Practice" Emerald Publishing: UK

SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	26 Feb	Introduction to Course What are the Technologies? Revision of Technology Mandatory and Stage 5 Technology syllabi Outline Stage 6 syllabi Stage 6 Technology syllabi review Introduction and explanation of AT1	* Ch 1 Text Bower, M (2017) Design of Technology Enhanced Learning Technology Mandatory Syllabus NESA website programs and resources DEC website programs and resources	
2	4 Mar	The new HSC Developing a Scope and Sequence and Assessment Schedule for Stage 6	NESA website Killen, R. (2008). Programming and assessment for quality teaching and learning. Melbourne: Thomson/Social	
3	11 Mar	Writing an Assessment Task for Stage 6 Developing, writing and understanding marking criteria and guidelines	EXCEL texts - Design and Technology Preliminary and HSC, Excel Study Guide Pascal Press Glebe HSC marking guidelines for Technology subjects	
4	18 Mar	Practical projects in Stage 6 Technology subjects	Folios and practical projects, monitoring, timing and accountability	Task 1 - Scope and Sequence/Assessment Schedule and Task due Wednesday 20/3/24
5	25 Mar	Using Technology within the Stage 6 curriculum HSC data analysis	Report writing guidelines SMART data program RAP package analysis SCOUT data	
6	1 Apr	Format of HSC exams in Technology Glossary of terms	Directive terms used in the HSC	
7	8 Apr	HSC Compliance/ HSC Monitoring folders	HSC Breaches Requirements of monitoring folders and accountability of teachers	Task 2 - Assessment Presentation of a Technology issue due In class presentation
Mid Term Break				
Mid Term Break				
8	29 Apr	Preparing and applying for employment.	Writing a CV and cover letter Mandatory Training requirements Selecting Referees	Task 3 – In class examination (in class tutorial time)

ASSESSMENTS

This course has 3 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Written Task	Wednesday March 20th at 11.59pm	Group	35%	1, 2, 3, 4
2	Presentation	Saturday April 6th – presentation slides due at 11.59pm In class presentation Week 7 tutorial	Individual	30%	2, 4
3	In class Examination	Week 8	Individual	35%	1, 2, 3, 4

Late Submissions The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Written Task

Assessment Type Written Assignment

Purpose The purpose of this task is to assess the use of scope and sequencing when developing teaching and learning programs for senior students. This will ensure a deeper understanding of planning, the syllabus and assessment.

Description Task 1 Scope and Sequence and Assessment Schedule Stage 6
Use the Stage 6 Syllabus (that you will be qualified to teach) for the 4 part task.

Part One: Design a scope and sequence for a Stage 6 Technology syllabus

Part Two: Create an Assessment Schedule for the same Stage 6 Technology subject
Use the Proforma provided by your tutor
Ensure NESA guidelines for assessment have been met

Part Three – Create 2 original assessment tasks suitable for Stage 6 from your schedule (assessment task notifications).
Use the Proforma provided by your tutor
Include all relevant outcomes from the chosen syllabus
Ensure the task matches one from the Assessment Schedule
Create a set of outcomes-based marking guidelines based on levels organised into appropriate performance bands based on the taxonomy of learning.

Part Four – Prepare a marking rubric for the assessment tasks

Weighting 35%

Due Date Wednesday March 20th

Submission Method Online

Assessment Criteria Part One: Scope and Sequence must accurately reflect teaching time for each part of the syllabus and outline timing and weighting of assessment
Part Two: The Assessment Schedule must follow NESA requirements
Part Three: Assessment Task notification must relate directly to outcomes assessed and include information on weighting, due date and task description
Part Four: Task rubric must reflect outcomes and each part of the task description. Rubric must be detailed and clearly outline expectations in each performance band.

Return Method Online

Feedback Provided Online - Two weeks after the final task is received.

Assessment 2 - Presentation

Assessment Type	Presentation
Purpose	Consumption of Technology based products is contributing negatively to our modern environment. Technology educators have a responsibility to educate students about more sustainable options and lifestyle choices within the technologies.
Description	Give a 6 minute oral presentation on a solution to an environmental problem Present a 6 minute oral presentation that covers the following: a) Research an environmental problem within an area of Technology eg: Food Technology – packaging waste, food miles, pollution from food processing Textiles – Fast fashion and it's disposal, production of cotton or synthetics Multimedia/IPT – built in obsolescence, disposal of tech IT _ Timber/Metal/Engineering and /Design and Tech – Sourcing and manufacture of building materials, disposal of these materials b) Evaluate the impact on the environment c) Describe a solution/s to overcome or minimise the problem Presentations will occur in Week 7 during class tutorial/workshop time
Weighting	30%
Length	7 Minute Presentation
Due Date	Saturday April 6th – presentation slides due at 11.59pm In class presentation due in Week 7 tutorial
Submission Method	In Class
Assessment Criteria	1. Evaluates the impact of one technology related to a Stage 6 Technology subject on the environment. 2. Examines and describes a plausible solution to this environmental issue. 3. Presentation is articulate, professional and delivered within the time limit, using appropriate and professionally presented ICT methods, literacy and grammar
Return Method	Online (presentation powerpoint submitted online before presentation)
Feedback Provided	Online

Assessment 3 - Examination

Assessment Type	In Term Test
Purpose	It is vital that Education students in their final year have a deep understanding of the Stage 6 curriculum and NESA requirements around accountability, assessment, delivering the syllabus, HSC examinations and HSC rules and terminology. This exam will test the knowledge gained from the lectures and tutorials throughout this course.
Description	A written examination will be held in Tutorial time in Week 8
Weighting	35%
Due Date	Week 8 (in class)
Submission Method	Online (In class written test) Please submit this task to Canvas
Assessment Criteria	1. Knowledge of the new HSC and HSC syllabi in Technology 2. Understanding of NESA guidelines with Stage 6 assessment and reporting 3. Understanding of monitoring procedures, compliance and accountability when teaching HSC classes 4. Ability to interpret data about student performance in the HSC 5. Understanding of the role of the teacher in the supervision of HSC major projects
Return Method	Online
Feedback Provided	Online - Within 2-3 weeks of task being submitted.

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Attendance

Attendance/participation will be recorded in the following components:

- Tutorial (Method of recording: Marking a roll)
- Workshop (Method of recording: Marking a roll)

70% attendance at both tutorials and workshops is a course requirement

Communication Methods

Communication methods used in this course include:

- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.
- Face to Face: Communication will be provided via face to face meetings or supervision.

Important messages will be emailed to students or placed on Canvas.
Please check Canvas regularly

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure. In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule.

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35.

Adverse Circumstances	The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where: 1. the assessment item is a major assessment item; or 2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system; 3. you are requesting a change of placement; or 4. the course has a compulsory attendance requirement. Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at: https://policies.newcastle.edu.au/document/view-current.php?id=236
Important Policy Information	The 'HELP for Students' tab in UoNline contains important information that all students should be familiar with, including various systems, policies and procedures.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.