

# EDST6726

Extension Mathematics Method 1

Term 1, 2022

## Course Overview

### Staff Contact Details

#### Convenors

Name	Email		Availability	Location	Ph

## Acknowledgement of Country

UNSW Arts, Design and Architecture Kensington and Paddington campuses are situated on the traditional lands of the Bidjigal and Gadigal peoples who are the traditional custodians of the land. We acknowledge the Aboriginal and Torres Strait Islander peoples, the winds and waters we all now share, and pay respect to their unique and enduring cultures which deepen and enrich the life of our nation and community.

## Course Details

Units of Credit 6

Workload

150 hours including class contact hours, readings, class preparation, etc.

## Summary of the Course

This is a hybrid course. It is available to both undergraduate and postgraduate students. The content, delivery and assessment will be identical for both groups of students.

This course is designed to increase a student's pedagogical content knowledge and skills for teaching. The key elements of pedagogy and Mathematics content knowledge will be developed. Students will critically address how these elements can be applied in classroom practice for addressing the requirements and philosophy of the NSW syllabuses.

## Course Learning Outcomes

1. Demonstrate knowledge and understanding of the NSW Board of Studies Mathematics Syllabuses for stages 4/5 and stage 6 and extension Mathematics.
2. Demonstrate the essential link between outcomes, assessment, teaching and learning planning.
3. Discuss classroom strategies that recognize students' different abilities and learning needs.
4. Analyse specific assessment strategies for a diverse range of students.
5. Develop appropriate and engaging resources for the Mathematics syllabus that account for students' skills, interests and prior achievements and their diverse cultural and religious backgrounds.

## Australian Professional Standards for Teachers

Standard	Description	Assessment/s
1.2.1	Demonstrate knowledge and understanding of how students learn and the implications for teaching.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
1.3.1	Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious, and socioeconomic backgrounds.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
2.1.1	Demonstrate knowledge and understanding of the content and teaching strategies of the teaching area.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
2.4.1	Demonstrate broad knowledge of, understanding of and respect for Aboriginal and Torres Strait Islander histories, cultures, and languages.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
2.5.1	Know and understand literacy and numeracy teaching strategies and their application in teaching areas.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

2.6.1	Implement teaching strategies for using ICT to expand learning opportunities for students.	1, 2	curriculum
3.3.1	Include a range of teaching strategies.	1, 2	
3.4.1	Demonstrate knowledge of a range of resources including ICT engage students in their learning.	1, 2, 3	ICT

### National Priority Area Elaborations


## Assessment

Assessment task	Weight	Due Date	Course Learning



RUBRIC/FEEDBACK SHEET  
 EDST6726 EXTENSION MATHEMATICS METHOD 1  
 UNSW SCHOOL OF EDUCATION

Assessment Task 1: Designing an Assessment Task

Specific Criteria	(-)		>(+)		
Understanding of the question or issue and the key concepts involved					



Specific Criteria	(-)		>(+)		
<ul style="list-style-type: none"> <li>Reference specifically to material, research and ideas presented in method lectures, readings from the prescribed text and other sources, relevant lectures from the combined method lecture series and from the professional experience lectures on diversity</li> </ul>					
Structure and organisation of response					
Presentation of response according to appropriate academic and linguistic conventions					
General comments/recommendations for next time:					

Recommended: /20 (FL PS CR DN HD) Weighting: 30%

NB: The ticks in the various boxes are 56cm x 25cm. JTr Q 577.84450000000087008

RUBRIC/FEEDBACK SHEET  
 EDST6726 EXTENSION MATHEMATICS METHOD 1  
 UNSW SCHOOL OF EDUCATION

Assessment Task 2: Using Computer Based Technology

Specific Criteria	(-)		>(+)		
Understanding of the question or issue and the key concepts involved					

Specific Criteria	(-)		>(+)		
<ul style="list-style-type: none"> <li>Reference specifically to material, research and ideas presented in method lectures, readings from the prescribed text and other sources, relevant lectures from the combined method lecture series and from the professional experience lectures on diversity</li> </ul>					
Structure and organisation of response					
Presentation of response according to appropriate academic and linguistic conventions					
General comments/recommendations for next time:					

Recommended: /20 (FL PS CR DN HD) Weighting: 40%

NB: The ticks in the various boxes are 56cm x 25cm @ 77.84450000000087008







## Resources

Prescribed Resources

Required Texts

[www.cecnsw.catholic.edu.au](http://www.cecnsw.catholic.edu.au)

[www.curriculum.edu.au](http://www.curriculum.edu.au)

[www.curriculumsupport.education.nsw.gov.au](http://www.curriculumsupport.education.nsw.gov.au)

[www.aboriginaleducation.nsw.edu.au/index.html](http://www.aboriginaleducation.nsw.edu.au/index.html)

[www.nswteachers.nsw.edu.au](http://www.nswteachers.nsw.edu.au)

[www.mansw.nsw.edu.au](http://www.mansw.nsw.edu.au)

[www.aamt.com.au](http://www.aamt.com.au)

[www.hsc.csu.edu.au](http://www.hsc.csu.edu.au)

[www.tes.co.uk/teaching-resources](http://www.tes.co.uk/teaching-resources)

[www.desmos.com](http://www.desmos.com)

[www.merga.net.au](http://www.merga.net.au)

[www.geogebra.org](http://www.geogebra.org)

[www.scottle.edu.au](http://www.scottle.edu.au)

<https://mathslinks.net/>

<http://nrich.maths.org/>



## Submission of Assessment Tasks

### Turnitin Submission

If you encounter a problem when attempting to submit your assignment, please telephone External Support on 9385 3331 or email them on [external@tel](mailto:external@tel). Hours are 8:00am - 10:00pm on weekdays and 9:00am - 5:00pm on weekends. If you are unable to submit your assignment due to a fault with Turnitin, you must retain your ticket number from External Support (along with any screenshots) and include this as evidence to support your extension application. If you email External Support, you will automatically receive a ticket number, but if you telephone, you will need to provide one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either the LMS or the Turnitin assignment. In instances where this is not possible, it will be stated on the assignment page.

## Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own in various forms, from deliberate cheating to accidentally copying from a source.

UNSW groups plagiarism into the following categories:

**Copying** using the same or very similar words to the original text or idea without using quotation marks or using quotation marks. This includes copying materials, ideas,

## Academic Information

Due to evolving advice by NSW Health, students must check for updates to learning for all Arts, Design and Architecture courses this term (via Moodle provided.)

For essential student information relating to:

- requests for extension;
- late submissions guidelines;
- review of marks;
- UNSW Health and Safety policies;
- examination procedures;
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