



School of Education

EDST6756  
Extension Mathematics Method 2

Term 2 2020

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### IMPORTANT:

For student policies and procedures relating to assessment, attendance and student support, please see website, <https://education.arts.unsw.edu.au/students/courses/course-outlines/>

## 1. LOCATION

Faculty of Arts and Social Sciences  
School of Education  
EDST6756 Extension Mathematics Method 2 (6 units of credit)  
Term 2 2020

## 2. STAFF CONTACT DETAILS

Course Coordinator(s): Ed Habkoug  
Email: [e.habkoug@unsw.edu.au](mailto:e.habkoug@unsw.edu.au)  
Availability: By appointment

## 3. COURSE DETAILS

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<b>Course Name</b>	Extension Mathematics Method 2
<b>Credit Points</b>	6 units of credit
<b>Workload</b>	150 hours including class contact hours, readings, class preparation, assessment, follow up activities, etc.
<b>Schedule</b>	<a href="http://classutil.unsw.edu.au/EDST_T2.html">http://classutil.unsw.edu.au/EDST_T2.html</a>

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## STUDENT LEARNING OUTCOMES

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Outcome

1

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3.6 Demonstrate broad knowledge of strategies that can be used to evaluate teaching programs to improve student learning.

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4.1 Identify strategies to support inclusive student participation and engagement in classroom activities

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4.2 Demonstrate the capacity to organise classroom activities and provide clear directions

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5.1 Demonstrate understanding of assessment strategies, including informal and formal, diagnostic, formative and summative approaches to assess student learning.

## 5. TEACHING STRATEGIES

Teaching strategies used during the course will include:

- ◁ Small group cooperative learning, such as Jigsaw, Think, Pair, Share, to understand the importance of teamwork in an educational context and to demonstrate the use of group structures as appropriate to address teaching and learning goals.
- ◁ Explicit teaching, including lectures, to demonstrate an understanding of stude demonstrate



## 7. RESOURCES

### **Course Texts**

Cavanagh, M. & Prescott, A. (2014). *Your Professional Experience Handbook: A guide for preservice teachers*. Sydney: Pearson.

Goos, M., Stillman, G., & Vale, C. (2016). *Teaching secondary school mathematics: Research and practice for the 21st century*. Sydney: Allen & Unwin

All students must have copies of the following NESA Mathematics syllabuses:

◁ *Mathematics K-*



<https://www.nctm.org/>

<http://educationstandards.nsw.edu.au/wps/portal/nesa/home>

NESA decides what is to be taught and examined. It also provides information about syllabus development, assessment requirements and examination timetables. The main function of this site is to provide teachers and students useful reference material, links to various related sites and an annotated bibliography of texts relevant to the syllabus and to Mathematics teaching.

<http://www.det.nsw.edu.au> - The Department of Education and Training.

The DET has the responsibility for administering and staffing government schools and producing support material which can be found at:

## 8. ASSESSMENT

Assessment Task	Length	Weight	Student Learning Outcomes Assessed	AITSL Professional Graduate Teaching Standards Assessed	National Priority Area Elaborations	Due Date
<b>Assessment 1</b> Designing a Unit of work	Unit Plan (N/A)  Critical Reflection, Justification and Analysis  (1,500 words equivalent)	40%	1 – 5	1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 3.3, 3.4, 3.6, 4.1, 4.2, 5.1, 5.2	A.5, A.8, C.3, C.4, C.5, C.6, C.8, C.13, C.14, D.6, D.7, D.8, D.9, D.10, D.11, D.12, D.13, D.14, D.15, D.16, D.17, D.18, D.19, E.1, E.4, E.5, E.6, E.8, F.5, F.6, F.7	Friday August 7 <sup>th</sup> by 5pm
<b>Assessment 2</b> Designing a Project, Exploration, Investigation or Modelling Assessment Task	3,500 words equivalent	60%	1 – 5	1.2, 1.3, 1.5, 2.1, 2.3, 2.4, 2.5, 3.3, 3.4, 5.1, 5.2, 5.3, 5.5	A.5, A.8, B.1, B.2, B.4, B.5, B.6, B.7, B.10, C.3, C.4, C.5, C.6, C.8, C.13, C.14, D.6, D.7, D.8, D.9, D.10, D.11, D.12, D.13, D.14, D.15, D.16, D.17, D.18, D.19, E.1, E.4, E.5, E.6, E.8, F.5, F.6, F.7	Monday 31 <sup>st</sup> August by 5pm

### **Submission of assessments**

Students are required to follow their lecturer's instructions when submitting their work for assessment. All assessment will be submitted online via Moodle by 5pm on the dates specified above. Students are also required to keep all drafts, original data and other evidence of the authenticity of their work for at least one year after examination. If an assessment is mislaid the student is responsible for providing

## **Assessment Details**

### **Assessment 1: Designing a Unit of work**

In this Assessment you will be required to prepare a Unit of work based on a topic and year level (from the

## **Assessment 2: Designing a Project, Exploration, Investigation or Modelling Assessment Task for a NESA Stage 6 Mathematics (Advanced, Extension 1 or 2) course**

According to NESA, assessment is the process of gathering valid and useful information and making judgements about student achievement for a variety of purposes. In Stage 6, those purposes include:

- ◁ assisting student learning
- ◁ evaluating and improving teaching and learning programs
- ◁ providing evidence of student achievement and course completion in Year 11 and Year 12 courses
- ◁ providing data for the end of school credential, the Record of School Achievement (RoSA) or Higher School Certificate (HSC)

In the lectures (and tutorials) you had an opportunity to engage in conjunction with your pre-assigned co-teachers (groupwork)

In your final submission, you are also required to address the following:

- ⟨ Prepare a [formal assessment notification](#) (as prescribed by NESA) to be issued to students
- ⟨ Strategies to prevent [malpractice](#) (HSC: All my Own work) which are advised to the student or visit [Honesty in HSC Assessment – the Standard](#)
- ⟨ Use correct mathematical language, notation and is coherent and concise
- ⟨ Monitoring processes at key point(s) to provide informal feedback and to assist in determining student authorship and
- ⟨ Express yourself, in your independent reflection, in grammatically correct standard Australian English. Refer to the [SED Guidelines on Assessment Policy and Procedures 2020](#). The style guide and related resources are available at <http://www.apastyle.org/>



UNSW SCHOOL OF EDUCATION  
 FEEDBACK SHEET  
 EDST6756 EXTENSION MATHEMATICS METHOD 2

Student Name:  
 Assessment Task 2

Student No.:

SPECIFIC CRITERIA	(-) <span style="font-size: 2em;">→</span> (+)					
<b>Understanding of the question or issue and the key concepts involved</b> <ul style="list-style-type: none"> <li>◁ Understanding the task and its relationship to relevant areas of theory, research and practice.</li> <li>◁ Rationale linked to <u>outcomes</u> in the syllabus.</li> </ul>	<table border="1" style="width: 100%; height: 40px;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> </table>					
<b>Depth of analysis and/or critique in response to the task</b> <ul style="list-style-type: none"> <li>◁ Ability to plan and implement an assessment for effective learning using knowledge of the NSW syllabus documents or other curriculum requirements of the education act.</li> <li>◁ Reasons for the choice of assessment task effectively explained including prepare a <u>formal assessment notification</u> (as prescribed by NESAs) to be issued to students; strategies to prevent malpractice; monitoring processes at key point(s) to provide informal feedback and to assist in determining student authorship</li> <li>◁ Demonstration of knowledge, respect and understanding of the social, ethnic, cultural and religious backgrounds of students and how these factors may affect learning.</li> <li>◁ Demonstrates knowledge of resources and modification of a task that will <u>engage and extend</u> all students.</li> <li>◁ Development of a marking criteria or guidelines in order to clarify expectations, and a marking rubric to match the task as part of the feedback provided upon completion of the task</li> <li>◁ <u>Clear statement of syllabus outcomes</u></li> <li>◁ Assessment task is clearly linked to syllabus outcomes and chosen</li> </ul>						

**Lecturer**

**Recommended:**        /20        (FL PS CR DN HD)

**Date**

**Weighting:**        60%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. \_\_\_\_\_

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