



# TEP 430

## Mathematics in the Secondary School II

S2 Day 2018

*Department of Educational Studies*

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#### **Disclaimer**

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## General Information

Unit convenor and teaching staff

Unit Convenor

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X5B267

Credit points

3

Prerequisites

TEP401(S) and TEP429

Corequisites

TEP402

Co-badged status

Unit description

This unit continues the examination of the secondary Mathematics curriculum and its teaching covered in TEP429. There are three main themes: understanding the central concepts of school calculus; teaching methods, including unit planning and the role of assessment in Mathematics education; and practical and professional issues arising from students' concurrent professional experience in TEP402. Particular emphasis is given to learning and teaching Mathematics in Years 11 and 12. Please consult the Secondary TEP Guide for recommended prior studies.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

On successful completion of this unit, you will be able to:

1. Demonstrate knowledge and understanding of research into how students learn and the implications for teaching
2. Demonstrate knowledge and understanding of the concepts, substance and structure of the content and strategies of Stage 6 of the mathematics syllabuses
3. Plan lesson sequences using knowledge of student learning, content and effective

teaching strategies

4. Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning
5. Demonstrate understanding of assessment strategies, including formal and informal, diagnostic, formative and summative approaches to assess student learning
6. Develop oral communication skills, listening skills, and teamwork skills

## General Assessment Information

Applications for extensions must be made via AskMQ at <https://ask.mq.edu.au> as a "Special Consideration" request before the submission date. Students who experience a disruption to their studies through ill-health or misadventure are able to apply for this request. Extensions can only be granted if they meet the Special Consideration policy and are submitted via [ask.mq.edu.au](https://ask.mq.edu.au). This will ensure consistency in the consideration of such requests is maintained.

In general, there should be no need for extensions except through illness or misadventure that would be categorised as unavoidable disruption according to the University definition of same, and currently available at: <https://students.mq.edu.au/study/my-study-program/special-consideration>

Late submissions without extension will receive a penalty of 5% reduction of the total possible mark for each day late (including weekends and public holidays). You are reminded that submitting even just 1 day late could be the difference between passing and failing a unit. Late penalties are applied by unit convenors or their delegates after tasks are assessed.

No assessable work will be accepted after the return/release of marked work on the same topic. If a student is still permitted to submit on the basis of unavoidable disruption, an alternative topic may be set.

Students should keep an electronic file of all assessments. Claims regarding "lost" assessments cannot be made if the file cannot be produced. It is also advisable to keep an electronic file of all drafts and the final submission on a USB untouched/unopened after submission. This can be used to demonstrate easily that the assessment has not been amended after the submission date.

### Special consideration

The following link takes you to the Special Consideration policy, which makes clear the ways in which you can apply for special consideration in times of difficulty.

<https://students.mq.edu.au/study/my-study-program/special-consideration>

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">Test development</a>	60%	No	Week 9

Name	Weighting	Hurdle	Due
<u>JLP Portfolio</u>	40%	No	During S2

## Test development

Due: **Week 9**

Weighting: **60%**

Select a unit of work from any **senior** mathematics course. Then plan a unit test designed to fit into a 60 minute lesson.

On successful completion you will be able to:

- 2. Demonstrate knowledge and understanding of the concepts, substance and structure of the content and strategies of Stage 6 of the mathematics syllabuses
- 5. Demonstrate understanding of assessment strategies, including formal and informal, diagnostic, formative and summative approaches to assess student learning

## JLP Portfolio

Due: **During S2**

Weighting: **40%**

The second assignment is a portfolio of two sections: (i) your reflections on the JLP process; and (ii) the comments you made on the Joint Lesson Presentation prepared by another group of students and assigned to you as a reactor.

On successful completion you will be able to:

- 1. Demonstrate knowledge and understanding of research into how students learn and the implications for teaching
- 2. Demonstrate knowledge and understanding of the concepts, substance and structure of the content and strategies of Stage 6 of the mathematics syllabuses
- 3. Plan lesson sequences using knowledge of student learning, content and effective teaching strategies
- 4. Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning
- 6. Develop oral communication skills, listening skills, and teamwork skills

## Delivery and Resources

TEP430 is taught in weekly workshops. Students are encouraged to bring their own laptop, iPad, etc or to access and print the workshop materials from the unit iLearn page.

Students will require access to the internet to complete and submit their assignments which

should be word processed.

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

Undergraduate students seeking more policy resources can visit the [Student Policy Gateway](https://students.mq.edu.au/support/study/student-policy-gateway) (<https://students.mq.edu.au/support/study/student-policy-gateway>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/study/getting-started/student-conduct>

## Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](https://ask.mq.edu.au).

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](https://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Graduate Capabilities

### Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

#### Learning outcome

- 3. Plan lesson sequences using knowledge of student learning, content and effective teaching strategies

#### Assessment task

- JLP Portfolio

### Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

## Learning outcome

- 3. Plan lesson sequences using knowledge of student learning, content and effective teaching strategies

## Assessment task

- Test development

## Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

## Learning outcome

- 6. Develop oral communication skills, listening skills, and teamwork skills

## Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

## Learning outcomes

- 1. Demonstrate knowledge and understanding of research into how students learn and the implications for teaching
- 2. Demonstrate knowledge and understanding of the concepts, substance and structure of the content and strategies of Stage 6 of the mathematics syllabuses
- 3. Plan lesson sequences using knowledge of student learning, content and effective teaching strategies
- 4. Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning
- 5. Demonstrate understanding of assessment strategies, including formal and informal, diagnostic, formative and summative approaches to assess student learning

## Assessment tasks

- Test development
- JLP Portfolio

## Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

## Learning outcomes

- 1. Demonstrate knowledge and understanding of research into how students learn and the implications for teaching
- 3. Plan lesson sequences using knowledge of student learning, content and effective teaching strategies

## Assessment tasks

- Test development
- JLP Portfolio

## Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

## Learning outcomes

- 3. Plan lesson sequences using knowledge of student learning, content and effective teaching strategies
- 6. Develop oral communication skills, listening skills, and teamwork skills

## Assessment tasks

- Test development
- JLP Portfolio



## Changes from Previous Offering

The assessment schedule has been changed.