

EDU118

Foundations of Numeracy

School: School of Education and Tertiary Access

2026 | Trimester 1

UniSC Sunshine Coast

UniSC Moreton Bay

UniSC Fraser Coast

UniSC Adelaide

BLENDED
LEARNING

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

Online

ONLINE

You can do this course without coming onto campus, unless your program has specified a mandatory onsite requirement.

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 encourages you to reflect on your personal mathematics learning journey and develop strategies to help yourself and future students overcome mathematics anxiety. You will develop an understanding of numeracy and identify some of the numeracy demands in different curriculum areas. You will develop your personal mathematics and numeracy capability and teaching practices for these within the Australian Curriculum and/or Early Years Learning Framework.

1.2. How will this course be delivered?

| ACTIVITY | HOURS | BEGINNING WEEK | FREQUENCY |
|---|-------|----------------|-----------|
| BLENDED LEARNING | | | |
| Learning materials – Learning materials will be available each week that include pre-recorded material and follow-up activities. Weekly notes will be available to accompany all lectures to support your learning. | 2hrs | Week 1 | 9 times |
| Tutorial/Workshop 1 – There will be a scheduled weekly tutorial of two hours. Weekly tutorial notes will be available to accompany all tutorials to support your learning. There will be a scheduled weekly tutorial of two hours. . | | | |
| ONLINE | | | |
| Learning materials – Learning materials will be available each week that include pre-recorded material and follow-up activities. Weekly notes will be available to accompany all lectures to support your learning. | 2hrs | Week 1 | 9 times |
| Tutorial/Workshop 1 – There will be a scheduled weekly tutorial of two hours. Weekly tutorial notes will be available to accompany all tutorials to support your learning. | 2hrs | Week 1 | 10 times |

1.3. Course Topics

This course will cover topics associated with numeracy as a cross-curriculum priority. Specific topics include: numeracy across the curriculum; numeracy and mathematics; numeracy in number and algebra; numeracy in measurement and geometry; numeracy in probability and statistics; numeracy in the real-world; authentic numeracy tasks; teaching strategies (including inquiry learning, problem-based learning, use of worked examples); critical numeracy; numeracy reading and writing; national numeracy assessments; and the mathematics curriculum.

2. What level is this course?

100 Level (Introductory)

Engaging with discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Limited or no prerequisites. Normally, associated with the first full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 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 Reflect on and evaluate your experiences with mathematics and numeracy and develop and refine your personal mathematics and numeracy skills. | Creative and critical thinker Empowered | 1, 1.2, 2, 2.1, 2.5, 3.3, 3.7, 6.4, 7, 7.3 |
| ② Demonstrate your knowledge of personal mathematics and numeracy. | Knowledgeable Empowered Engaged | 2.1, 2.5 |
| ③ Devise, design and organise engaging numeracy opportunities for learners. | Knowledgeable Creative and critical thinker Empowered Engaged | 1.2, 2.1, 2.5, 3.3 |
| ④ Analyse research to understand numeracy as an educational goal, to identify numeracy opportunities in the school and/or prior-to-school curriculum and at home and communicate the importance of numeracy. | Knowledgeable Empowered Ethical Engaged Information literacy | 2.5 |
| ⑤ Create oral and/or written communication concerning curriculum, teaching, learning, and assessment for classroom and professional contexts. | Ethical Communication Information literacy | 2.1, 2.5 |

* Competencies by Professional Body

| CODE | COMPETENCY |
|--|--|
| AUSTRALIAN INSTITUTE FOR TEACHING AND SCHOOL LEADERSHIP | |
| 1 | PROFESSIONAL KNOWLEDGE: Know students and how they learn |
| 1.2 | Understand how students learn: Demonstrate knowledge and understanding of research into how students learn and the implications for teaching. |
| 2 | PROFESSIONAL KNOWLEDGE: Know the content and how to teach it |
| 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 |

| CODE | COMPETENCY |
|------|---|
| 2.5 | Literacy and numeracy strategies: Know and understand literacy and numeracy teaching strategies and their application in teaching areas. |
| 3.3 | Use teaching strategies: Include a range of teaching strategies. |
| 3.7 | Engage parents/carers in the educative process: Describe a broad range of strategies for involving parents/carers in the educative process. |
| 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 | PROFESSIONAL ENGAGEMENT: Engage professionally with colleagues, parents/carers and the community |
| 7.3 | Engage with the parents/carers: Understand strategies for working effectively, sensitively and confidentially with parents/carers. |

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

Not applicable

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

Self diagnostic exercise in Week 1 to inform Task 1.

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 | Written Piece | Individual | 20% | 1000 words | Week 4 | Online Assignment Submission with plagiarism check |
| All | 2a | Quiz/zes | Individual | 0% | 30 mins | Week 1 | Online Test (Quiz) |
| All | 2b | Examination - not Centrally Scheduled | Individual | 40% | One hour | Week 8 | Online Test (Quiz) |
| All | 3 | Oral and Written Piece | Group | 40% | 10 minutes per group in class. | Refer to Format | In Class |

All - Assessment Task 1: Reflection on your mathematics learning to date

| | | |
|------------------------|--|----------------------------------|
| GOAL: | The goal of this task is to reflect your mathematics learning journey to date and then consider what these experiences with mathematics will mean for you as a teacher to support students you may teach. | |
| PRODUCT: | Written Piece | |
| FORMAT: | <p>Part A. Understanding yourself as learner of mathematics.</p> <p>Write your personal mathematical life history, describing and reflecting on your experiences of learning mathematics at school and at university. How did mathematics lessons make you feel? What were some of the challenges that you or your friends experienced in learning mathematics? What was the influence of different teachers and other people you may have encountered? Give specific examples to illustrate your story.</p> <p>Part B. Imagining yourself as a future teacher.</p> <p>Drawing on your own experience of learning mathematics, consider how you might help your students develop a positive attitude towards mathematics (or numeracy). Your personal development plan should be mentioned here. Use current and relevant academic literature and course readings to support your description where appropriate. Apply APA 7th formatting and referencing throughout the assignment.</p> | |
| CRITERIA: | <p>No.</p> <ol style="list-style-type: none"> 1 1. Reflection and evaluation of mathematics and numeracy experiences. 2 Analysis of research into mathematics and numeracy teaching and learning strategies. 3 Written communication skills and academic literacies including use of credible evidence and sources, and APA referencing conventions. | Learning Outcome assessed |
| GENERIC SKILLS: | Communication, Problem solving, Information literacy | |

All - Assessment Task 2a: Formative In-Class Quiz and Personal Numeracy Professional Development

| | | |
|------------------------|--|----------------------------------|
| GOAL: | The goal of this in-class task is to demonstrate your current personal knowledge and understanding of mathematics and numeracy and evaluate your own personal numeracy professional development needs. | |
| PRODUCT: | Quiz/zes | |
| FORMAT: | <p>Online and in-class quiz made available to students during week 1 tutorial. No preparation is need for this formative quiz. The quiz will contain both multiple choice and short answer items. Once you have received your quiz result you will develop a personal development plan in the week 2 tutorial. The personal development plan will be used in your Task 1 submission.</p> | |
| CRITERIA: | <p>No.</p> <ol style="list-style-type: none"> 1 Knowledge of personal mathematics and numeracy. 2 Plan to improve your personal mathematics and numeracy skills. | Learning Outcome assessed |
| GENERIC SKILLS: | Problem solving, Information literacy | |

All - Assessment Task 2b: Online In-Class Exam

| | | |
|------------------------|---|----------------------------------|
| GOAL: | The goal of this in-class task is to demonstrate your knowledge of numeracy as a professional standard and evaluate your own personal numeracy professional development. | |
| PRODUCT: | Examination - not Centrally Scheduled | |
| FORMAT: | Online In-Class Exam in CANVAS during the week 8 tutorial. Blank paper will be supplied for students to show their working out. Students are required to submit their working out at the end of the exam. | |
| CRITERIA: | <p>No.</p> <p>1 Knowledge of personal mathematics and numeracy.</p> <p>2 Identification and understanding of numeracy opportunities in the school curriculum</p> <p>3 Evaluation of and plan to improve your personal mathematics and numeracy skills.</p> | Learning Outcome assessed |
| GENERIC SKILLS: | Communication, Problem solving | |

All - Assessment Task 3: Group Oral Presentation

| | | |
|------------------------|---|----------------------------------|
| GOAL: | Your group will encourage students to demonstrate multiple pathways for solving a problem (selected from a list provided on CANVAS) drawing on some of the teaching strategies presented during weekly tutorials. | |
| PRODUCT: | Oral and Written Piece | |
| FORMAT: | <p>Group Oral Presentations are in the weeks 9 and 10 tutorial classes.</p> <p>Task: In your tutorial class, present a research informed group oral presentation on a topic (or activity) of your choice from one of your teaching areas within the Australian Curriculum, Early Years Learning Framework (EYLF), or Queensland Kindergarten Learning Guidelines (QKLG).</p> <p>You need to:</p> <ol style="list-style-type: none"> 1. Identify the numeracy within the topic/activity. 2. Explain the numeracy dimensions, including mathematical knowledge, students need to understand to fully engage with the topic/activity. Use current and relevant academic sources to substantiate your explanations. 3. Describe how you might help students to understand the numeracy using teaching strategies and practices. Justify your choices with current and relevant academic literature. Provide a worked example as a point of reference for your justifications. 4. Submit a PowerPoint presentation and copies of any teaching and learning materials used in your group oral presentation. 5. Apply APA 7th formatting and referencing throughout the written components (e.g., PowerPoint). <p>This is a differentiated task based on your Program enrolment. Please refer to CANVAS for more details.</p> | |
| CRITERIA: | <p>No.</p> <p>1 Knowledge and understanding of numeracy and mathematics within the topic/activity.</p> <p>2 Selection, design, and justification of numeracy opportunities using credible evidence and sources.</p> <p>3 Oral and written communication skills and academic literacies including APA referencing conventions.</p> | Learning Outcome assessed |
| GENERIC SKILLS: | Communication, Collaboration, Problem solving, Organisation, Applying technologies, Information literacy | |

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.

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

There are no required/recommended resources for this course.

8.2. Specific requirements

Not applicable

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:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

Less than 15 minutes: No penalty

From 15 minutes to 30 minutes: 20% penalty

More than 30 minutes: 100% penalty

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](#) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](#) 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](#) 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