



# COGS704

## Advanced Principles of Cognitive Science: Memory, Self, and Cognitive Theory

S1 Day 2018

*Department of Cognitive Science*

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#### Disclaimer

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## General Information

Unit convenor and teaching staff Celia Harris <a href="mailto:celia.harris@mq.edu.au">celia.harris@mq.edu.au</a>
Credit points 4
Prerequisites Admission to MRes
Corequisites
Co-badged status
Unit description This unit forms part of a four-unit core sequence covering a range of foundational and cutting-edge research topics in cognitive science, with an emphasis on active research programs at MQ. This team-taught unit is made up of a selection of 3-4 topic modules, led by experts specialising in these fields. Topics to be covered may include but are not limited to: the nature of individual and social memory from an interdisciplinary perspective; views about the relationship between memory and the self; disorders of belief formation such as delusion; and theories of consciousness.

## 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:

- Increase understanding of the nature of memory and how it is conceptualised and studied in both laboratory and ecological research traditions
- Increase understanding of the role and mechanisms of remembering and forgetting, functions of memory, and the relationship between individual and social memory
- Increase understanding of the nature of normal and pathological cognitive decline with age, and the various ways that memory can be supported
- Improve and/or develop ability to critically evaluate scientific claims, methods and data
- Develop skills in conducting a conceptual literature review

Improve and/or develop ability to draw links between theory, concepts, and findings across different domains and fields

Improve and/or develop ability to present research to an audience in a clear and engaging way

## General Assessment Information

### LATE PENALTIES

Late submission of an assignment will attract a penalty of 5% of the maximum mark for every day that the assignment is late (including weekend days). For example, if the assignment is worth 40 marks and your assignment is submitted 2 days late, a penalty of  $2 \times 5\% \times 40 = 4$  marks will be applied and subtracted from the awarded mark for the assignment. Work submitted more than 7 days after the submission deadline will not be marked and will receive a mark of 0. Please note that it is the student's responsibility to notify the University of a disruption to their studies and requests for extensions for assignments must be made via the University's Ask MQ System (as outlined in the Special Consideration Policy).

Questions about the assessment tasks?

Please email the unit convenors for clarification or questions about any of the assessments - we are happy to discuss essay directions in advance of submission if necessary.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">Class presentation 1</a>	20%	No	TBA
<a href="#">Class presentation 2</a>	30%	No	TBA
<a href="#">Final Essay</a>	40%	No	TBA
<a href="#">Active participation</a>	10%	No	TBA

### Class presentation 1

Due: **TBA**

Weighting: **20%**

Students will select a week (out of Weeks 3, 4, 5, and 6), in which to present to the class. This presentation will involve recording an example of everyday memory scaffolding. Students will present this example to the class and lead discussion for approximately 15 to 20 minutes. Students will make a video or a slideshow to illustrate the example, linking the example to its relevant literature and important concepts, and leading discussion on some key questions:

1. Who is being scaffolded?
2. How are they being scaffolded?

3. What is memory success in this context?
4. What dimensions might be important?

This relates to learning outcomes:

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- Improve and/or develop ability to present research to an audience in a clear and engaging way

On successful completion you will be able to:

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## Class presentation 2

Due: **TBA**

Weighting: **30%**

Students will select a week (out of Weeks 8,9,10,11,and 12) to present a literature review to the class. For this literature review, students will select approximately 5-10 studies and classify them according to the criteria we have developed in class for the conceptual review. Students will present a summary to class and lead discussion on evaluating the research, how to classify them according to our dimensions of interest, and how we can enter the information into our review. Students will submit the excel spreadsheet they have used to classify the studies, by the day after their presentation as part of the assessment process.

This relates to learning outcomes:

- Increase understanding of the nature of normal and pathological cognitive decline with age, and the various ways that memory can be supported
- Improve and/or develop ability to critically evaluate scientific claims, methods and data

- Develop skills in conducting a conceptual literature review
- Improve and/or develop ability to draw links between theory, concepts, and findings across different domains and fields
- Improve and/or develop ability to present research to an audience in a clear and engaging way

On successful completion you will be able to:

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## Final Essay

Due: **TBA**

Weighting: **40%**

Students will prepare an essay to discuss the concept of memory scaffolding, and to critically evaluate the evidence for memory scaffolding in a research domain of their choice. This can be the same as the research that they reviewed for the literature review, or different. We will discuss the topic further in class. Word length is 2000 words excluding reference list.

The essay will be assessed based on:

1. Evidence of understanding the key theoretical concepts covered in class
2. Evidence of ability to integrate and evaluate research and theory
3. Writing style and ability to communicate effectively
4. Correct use of APA style for referencing

This relates to learning outcomes:

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- Improve and/or develop ability to critically evaluate scientific claims, methods and data
- Improve and/or develop ability to draw links between theory, concepts, and findings across different domains and fields

## Active participation

Due: **TBA**

Weighting: **10%**

All students are expected to read the set reading each week, and come to class prepared to discuss their opinions and to engage critically with the concepts we are learning about. Active participation will be assessed based on students showing evidence in class for their preparation and engagement with the topics.

This relates to learning outcomes:

- Improve and/or develop ability to critically evaluate scientific claims, methods and data
- Improve and/or develop ability to draw links between theory, concepts, and findings across different domains and fields
- Improve and/or develop ability to present research to an audience in a clear and engaging way

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## Delivery and Resources

### DELIVERY

There will be 13 weekly seminars that run for 2 hours each.

Seminars will start in Week 1 of Session 1 on Thursdays from 1:00pm to 3:00pm in the Australian Hearing Hub, Level 3, room 3.610 (Marrie).

We expect 100% attendance to the weekly seminars. If there are any issues with attendance, please email Dr Celia Harris in advance of the class. We require all students to participate in the class discussion, which requires thorough reading of the assigned papers.

### RESOURCES

Slides and readings for each lecture will be available on this unit's iLearn page.

## 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](http://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](http://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

### PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

#### Assessment task

- Active participation

### PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

#### Learning outcomes

- Increase understanding of the nature of memory and how it is conceptualised and studied in both laboratory and ecological research traditions
- Increase understanding of the role and mechanisms of remembering and forgetting, functions of memory, and the relationship between individual and social memory
- Increase understanding of the nature of normal and pathological cognitive decline with age, and the various ways that memory can be supported
- Develop skills in conducting a conceptual literature review

#### Assessment tasks

- Class presentation 1
- Class presentation 2
- Final Essay

### PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

## Learning outcomes

- Increase understanding of the nature of memory and how it is conceptualised and studied in both laboratory and ecological research traditions
- Increase understanding of the role and mechanisms of remembering and forgetting, functions of memory, and the relationship between individual and social memory
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## Assessment tasks

- Class presentation 1
- Class presentation 2
- Final Essay

## PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

## Learning outcomes

- Improve and/or develop ability to critically evaluate scientific claims, methods and data
- Develop skills in conducting a conceptual literature review
- Improve and/or develop ability to draw links between theory, concepts, and findings across different domains and fields

## PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

## Learning outcome

- Improve and/or develop ability to present research to an audience in a clear and engaging way

## Assessment tasks

- Class presentation 1
- Class presentation 2
- Final Essay

## PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

## Assessment tasks

- Class presentation 1
- Active participation

## Focus of the Unit

In 2018, the unit will focus more directly on one particular aspect of self and memory: namely, how memory can be scaffolded particularly in the face of cognitive decline. After learning about the theories of autobiographical memory, its link to self identity, and how memory can be supported by internal and external scaffolding, we will apply these concepts to the gerontology literature regarding therapies that are used to support memory in practical settings. We will use our theoretical knowledge to conduct a conceptual review and classify these therapies, to build an understanding of what principles make such therapies effective.