



# COGS301

## Current Problems in Cognitive Science

S2 Day 2019

*Department of Cognitive Science*

### Contents

<u>General Information</u>	2
<u>Learning Outcomes</u>	2
<u>General Assessment Information</u>	3
<u>Assessment Tasks</u>	3
<u>Delivery and Resources</u>	7
<u>Policies and Procedures</u>	8
<u>Graduate Capabilities</u>	9
<u>Optimizing Learning</u>	13
<u>Changes since First Published</u>	15

#### **Disclaimer**

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

## General Information

Unit convenor and teaching staff

Matthew Finkbeiner

[matthew.finkbeiner@mq.edu.au](mailto:matthew.finkbeiner@mq.edu.au)

Bianca De Wit

[bianca.dewit@mq.edu.au](mailto:bianca.dewit@mq.edu.au)

Credit points

3

Prerequisites

39cp at 100 level or above including 6cp in COGS units

Corequisites

Co-badged status

Unit description

Despite the explosive growth in recent decades of the cognitive and brain sciences, an abundance of fundamental problems remain unanswered. This unit provides students with the opportunity to think broadly and critically about the pressing issues facing cutting-edge cognitive science, and explore the theoretical and methodological foundations of this research. Students will have the opportunity to pursue a significant, independent research project exploring the primary scientific literature and latest findings on their chosen topic. Guest lectures cover recent developments and controversies in cognitive science, and other online resources will help to situate this focused project within the broader landscape of cognitive science. Throughout this unit, strong emphasis will be placed on effective scientific communication; the consolidation of acquired knowledge and skills; and the deepening of one's understanding of active problems in cognitive science research.

## 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:

Explain the mechanisms and processes underlying human cognitive functions.

Identify and critically evaluate theories of human cognitive function.

Evaluate experimental designs, analyses and empirical findings in terms of relevant

theory and problems.

Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.

Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## General Assessment Information

### Late Penalty

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 14 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 that requests for extensions for assignments must be made via the University's Ask MQ System (as outlined in the Disruption to Studies Policy).

### Assessment Tasks

Name	Weighting	Hurdle	Due
<u>Weekly Quizzes</u>	10%	No	Weeks 2-12
<u>Commentary Paper #1</u>	10%	No	Week 7
<u>Midterm Exam</u>	20%	No	Week 7
<u>Commentary Paper #2</u>	20%	No	Week 13
<u>Final Exam</u>	40%	No	Session 2 Exam Period

### Weekly Quizzes

Due: **Weeks 2-12**

Weighting: **10%**

Short multiple choice quizzes completed online each week prior to the tutorials and lecture. There will be 10 quizzes in total (no quiz in Week 1 or Week 7). Full points will be awarded for a quiz if at least 50% of the questions are answered correctly on each quiz. If less than 50% of the questions are answered correctly, no points will be awarded for that quiz. No make-up quizzes are permitted, but the 2 lowest quizzes will be dropped without penalty.

On successful completion you will be able to:

- Explain the mechanisms and processes underlying human cognitive functions.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.

## Commentary Paper #1

Due: **Week 7**

Weighting: **10%**

1. Commentary papers are 750 words maximum (double-spaced 12-pt font).
2. Commentary papers should be written with a clear and coherent structure. The tone should be measured and balanced and the text should be precise as well as concise.
3. The paper should be free of grammatical and spelling errors.
4. Where appropriate, use textual evidence to support your answer but do not quote long passages. Instead, try to reformulate statements and concepts in your own words.
5. Commentary papers are to be submitted electronically via Turnitin on the COGS301 iLearn site. No paper submissions will be accepted. The submission deadline is the end of Week 7 (Sunday 15 September @ midnight).
6. Late submission of your report will attract a penalty of 5% of the maximum mark for every day that the assignment is late (including weekend days). For example, if it is submitted 2 days late, a penalty of 10% (of the maximum possible) will be subtracted from the mark you receive for this assignment. Work submitted more than 14 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 that requests for extensions for assignments must be made via the University's Ask MQ System (as outlined in the Disruption to Studies Policy).

On successful completion you will be able to:

- Explain the mechanisms and processes underlying human cognitive functions.
- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.
- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.
- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## Midterm Exam

Due: **Week 7**

Weighting: **20%**

Multiple choice exam during scheduled lecture time (2 hours), which will assess all topics covered before the mid-semester break.

All students must attend lecture on the day of the mid-semester exam. If you are unable to sit the mid-semester exam at the specified time, you must advise the Student Centre via [ask.mq.edu.au](http://ask.mq.edu.au) and must also apply for Disruption to Studies through [ask.mq.edu.au](http://ask.mq.edu.au) and submit appropriate supporting documents. Original documents need to be presented at the Student Centre. This should be done within five (5) working days from the day of the examination. It should be noted that Macquarie University Policy states: "Pre-booked holidays will not routinely be considered unavoidable absences or commitments by the University". Students deemed eligible for a late mid-semester exam will be notified via email about the time and location of the exam. If a late mid-semester exam is necessary, there will only be one time available.

On successful completion you will be able to:

- Explain the mechanisms and processes underlying human cognitive functions.
- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.
- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## Commentary Paper #2

Due: **Week 13**

Weighting: **20%**

1. Commentary papers are 750 words maximum (double-spaced 12-pt font).
2. Commentary papers should be written with a clear and coherent structure. The tone should be measured and balanced and the text should be precise as well as concise.
3. The paper should be free of grammatical and spelling errors.
4. Where appropriate, use textual evidence to support your answer but do not quote long passages. Instead, try to reformulate statements and concepts in your own words.
5. Commentary papers are to be submitted electronically via Turnitin on the COGS301 iLearn site. No paper submissions will be accepted. The submission deadline is the end of Week 13 (Sunday 10 November @ midnight).

6. Because 10 November is the last day of the semester, no late submissions will be accepted. Again, please note that it is the student's responsibility to notify the University of a disruption to their studies and that requests for extensions for assignments must be made via the University's Ask MQ System (as outlined in the Disruption to Studies Policy).

On successful completion you will be able to:

- Explain the mechanisms and processes underlying human cognitive functions.
- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.
- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.
- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## Final Exam

Due: **Session 2 Exam Period**

Weighting: **40%**

Multiple choice and short answer questions covering lectures, assigned readings, and tutorial content over the entire semester.

Students need to present for examination at the time and place designated in the University Examination Timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations.

The only exception to sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for special consideration due to disruption to studies. If a Supplementary Examination is granted as a result of the Disruption to Studies process, the examination will be scheduled after the conclusion of the officially scheduled examination period for this course. The format of a supplementary examination is at each unit convenor's discretion and is subject to change from the original final examination. Supplementary Exams are only offered to students who have satisfactorily completed all other assessments for the unit and were unable to sit the final exam because of documented illness or unavoidable disruption.

It is the student's responsibility to follow the steps required to request a supplementary exam. An email will be sent to the student advising them of the outcome of their request. Students who

are granted to sit for a supplementary exam must make themselves available to sit for the supplementary exam on the specified date. There will only be one time. It is the student's responsibility to email Student Centre to confirm attendance at the supplementary exam. You are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, which is the final day of the official examination period.

On successful completion you will be able to:

- Explain the mechanisms and processes underlying human cognitive functions.
- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.
- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## Delivery and Resources

### Technology Used and Required

For this unit you will need to have access to a computer that can reliably connect to the Internet. This will be essential for completing online quizzes (see section on "Assessment Tasks"), and in accessing the unit's web-page, which can be found at: <https://ilearn.mq.edu.au>

### Required Readings

The course readings will be available through the Library (see the unit's iLearn page for specific details).

### Recommended Text

While this course does not have a textbook, students will find it helpful to read the chapter(s) in "A student's handbook" that are relevant for that week's lecture. The textbook can be accessed in the Library (BF311 .E94 2015) or online through the Library's website. The full title of the book is here:

Eysenck, M. W., & Keane, M. T. (2015). *Cognitive psychology: A student's handbook*. Psychology press.

## Delivery

The timetable for lectures & tutorials can be found on the University web site at: <http://www.timetables.mq.edu.au/>

**Lectures are held weekly (2 hours), starting in Week 1.** Lectures run from 9-11:00am Fridays

in 25a Wallys Walk - 209 Tutorial Room. Lecture slides will be uploaded before lecture time to the course's iLearn site. Lecture recordings are available via Echo360 in iLearn.

**Tutorials are held weekly (1 hour), starting in Week 1.** Please check eStudent for the time and location of your tutorial.

Due to restrictions on the availability of resources and to health and safety regulations you should attend the tutorial to which you have been assigned. Although students might be able to occasionally attend a different tutorial, most classes are likely to be full, in which case those not attending their assigned tutorial will be asked to leave. Under these circumstances, no special provisions will be made for attendance at an alternative tutorial class.

*Requests for tutorial changes:* Changes to tutorials need to be done online via eStudent only. After week 2, no further changes will be made unless supporting documentation about the reason for changing is provided and there is space in the tutorial you wish to enrol in. Please note that changes to tutorials cannot be made by the unit convenor or tutor.

## 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 published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) 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](mailto:ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@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](mailto:ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@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

- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.

## Assessment task

- Commentary Paper #1

## 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

- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## 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 outcomes

- Explain the mechanisms and processes underlying human cognitive functions.
- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.
- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.
- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## Assessment tasks

- Commentary Paper #1
- Commentary Paper #2
- Final Exam

## 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

- Explain the mechanisms and processes underlying human cognitive functions.
- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.

## Assessment tasks

- Weekly Quizzes
- Commentary Paper #1
- Midterm Exam
- Commentary Paper #2
- Final Exam

## 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

- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant

theory and problems.

- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.

## **Assessment tasks**

- Weekly Quizzes
- Commentary Paper #1
- Midterm Exam
- Commentary Paper #2
- Final Exam

## **Problem Solving and Research Capability**

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

## **Learning outcomes**

- Identify and critically evaluate theories of human cognitive function.
- Evaluate experimental designs, analyses and empirical findings in terms of relevant theory and problems.
- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.

## **Assessment tasks**

- Weekly Quizzes
- Commentary Paper #1
- Midterm Exam
- Commentary Paper #2
- Final Exam

## **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 outcome**

- Demonstrate clear and effective writing skills, including the ability to communicate complex ideas in an impartial manner.

## **Assessment tasks**

- Commentary Paper #1
- Commentary Paper #2
- Final Exam

## **Engaged and Ethical Local and Global citizens**

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

## **Learning outcome**

- Demonstrate effective time management and organisational skills; be able to assess your own learning against these learning outcomes and modify learning strategies accordingly.

## **Optimizing Learning**

### **What does it take to do well in COGS301?**

This unit is taught through lectures and tutorials with support from web-based resources such as iLearn. While lectures are useful principally for introducing new concepts and knowledge, the tutorials allow for more direct interactions between instructor and students. They are your opportunity to enhance your understanding further by participating in activities and asking questions. The iLearn discussion board also allows students to discuss topics in greater depth, and may also feature contributions by staff members when there appears to be confusion among the student body. The lecture schedule is a guide only, and is intended to be flexible. On occasion, more time will be spent on certain topics if additional explanation is required. As such, material from one lecture may overlap into the next, where necessary.

Students are expected to pay close attention to all lectures and to take notes to aid their retention of the material covered. Although echo360 will be invaluable when attendance is physically impossible, it is recommended that students attend lectures, as there are some aspects of the course that cannot be replicated through such media. Reading assigned during each lecture should be completed before and after the date of the relevant lecture. Reading

before lecture and then re-reading shortly after lecture is the best way to consolidate knowledge and enhance understanding. Attendance of, and active participation in tutorials is also mandatory. Online quizzes offer the chance to answer questions while using resources such as textbooks and lecture notes. This open book format is unlike formal examinations, and offers an opportunity for grade enhancement that should not be missed. In addition, other learning resources will be made available, such as lists of key terminology. It should be noted that according to Senate guidelines, workloads should involve 3 hours per credit point per week. This results in 9 hours per week (including lectures and practicals) for a 3 credit point unit such as COGS301.

### **What material is examinable?**

Both quiz and exam questions will come from topics covered during lectures and tutorials. Where additional information on these topics is supplied in the assigned reading, this should also be considered examinable. The examinations will not feature questions on topics not covered during lectures even if they are included in the assigned reading.

**Note: Assessment will be based on the successful *understanding* of material from lectures, tutorials and from the assigned reading. Please note that rote learning alone will not be a successful strategy, as the assessments will test for deeper appreciation of the course material in a variety of formats. Simply remembering the “facts” will not suffice. Students need to demonstrate their understanding of the principles, and demonstrate the ability to apply such understanding in new contexts.**

### **iLearn**

Students should check the iLearn web site at regular intervals for announcements, online quizzes, lecture notes, terminology lists, and other supplementary learning materials. It will also feature a discussion board on which students may converse about course material, or any other legitimate business related to COGS301. Links to echo360, which will be available in audio and video format, will be included. It is recommended that students visit this site regularly and make full use of the facilities.

### **Feedback**

In this course you will have several opportunities to get feedback, and to assess your progress through formative assessment activities. One of these will be through online quizzes offered on the course's iLearn webpage. These are part of the assessments for this course, and while they are in progress feedback will not be available. However, when each quiz closes, extensive details of why each given answer was correct or incorrect are given, and the student is directed towards the appropriate textbook pages to cement his/her understanding.

### **Academic Courtesy**

It is the right of each student to learn in an environment that is free of disruption and distraction. Please make an effort to arrive to class on time, and if you are unavoidably detained, please enter the lecture theatre as quietly as possible to minimise disruption, using the back entrance if

possible. Although some lecturers may allow questions during lectures, talking between students is often disruptive and is strongly discouraged. Phones, pagers, and other electronic devices that produce noise and other distractions must be turned off prior to entering class, and remain off for the duration of lectures and tutorials.

### Social Inclusion and Diversity

Social inclusion at Macquarie University is about giving everyone who has the potential to benefit from higher education the opportunity to study at university, participate in campus life and flourish in their chosen field. The University has made significant moves to promote an equitable, diverse and exciting campus community for the benefit of staff and students. It is your responsibility to contribute towards the development of an inclusive culture and practice in the areas of learning and teaching, research, and service orientation and delivery. As a member of the Macquarie University community, you must not discriminate against or harass others on the basis of their sex, gender, race, marital status, carers' responsibilities, disability, sexual preference, age, political conviction or religious belief. All lecturers, tutors and students are expected to display appropriate behaviour that is conducive to a healthy learning environment for everyone. The Unit Convenor is a member of the [Ally Network](#) and is happy to provide support to members of the LGBTIQ community.

## Changes since First Published

Date	Description
26/07/2019	forgot to change the time and location of the lecture!