# COGS202

## Brain and Language

S2 Day 2013

*Cognitive Science*

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General Information

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Credit points
3

Prerequisites
12cp

Corequisites

Co-badged status

Unit description
Human language is evolutionarily unique and culturally ubiquitous. It is central to human culture and humanity's place in nature. In this unit you will gain a basic knowledge of the brain mechanisms responsible for language. You will learn about how the brain develops the capacity for language in infancy; brain mechanisms of language production and understanding; and the nature of language breakdown due to brain injury. You will gain an understanding of theories about the nature of language, its evolution, and its relationship to other aspects of human cognition. You will learn about neuroimaging techniques and experimental methods for studying the language networks of the brain.

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:

The ability to explain contemporary issues concerning the relationship between human
language and the brain in light of scholarly theory and empirical work in the cognitive sciences, and to critique popular or prejudicial claims about the evolution and nature of language from an informed and evidence-based perspective. The ability to analyse the strengths and weaknesses of competing explanations and theories of brain and language: specifically, the capacity to evaluate critically, integrate, and apply carefully key concepts related to language, the mind/brain, and culture in relevant areas of social policy and political theory, education, and the cognitive sciences. The ability to apply findings from empirical research on brain and language, relating to current data, theories, and policy implications, to real-world contexts and debates about the complex neural bases of human linguistic capacities.

Assessment Tasks

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<tr>
<th>Name</th>
<th>Weighting</th>
<th>Due</th>
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<tr>
<td>Formal Exam</td>
<td>40%</td>
<td>Examination period</td>
</tr>
<tr>
<td>Online Quiz</td>
<td>15%</td>
<td>During semester</td>
</tr>
<tr>
<td>Research Report</td>
<td>45%</td>
<td>After Mid Semester break</td>
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Formal Exam

Due: Examination period
Weighting: 40%

On successful completion you will be able to:

- The ability to explain contemporary issues concerning the relationship between human language and the brain in light of scholarly theory and empirical work in the cognitive sciences, and to critique popular or prejudicial claims about the evolution and nature of language from an informed and evidence-based perspective.
- The ability to apply findings from empirical research on brain and language, relating to current data, theories, and policy implications, to real-world contexts and debates about the complex neural bases of human linguistic capacities.

Online Quiz

Due: During semester
Weighting: 15%

This quiz is low risk and will cover basic course content.
On successful completion you will be able to:

• The ability to explain contemporary issues concerning the relationship between human language and the brain in light of scholarly theory and empirical work in the cognitive sciences, and to critique popular or prejudicial claims about the evolution and nature of language from an informed and evidence-based perspective.

Research Report

Due: After Mid Semester break
Weighting: 45%

The research report will involve a critical evaluation of theory pertaining to the nature of language, its evolution, or its relationship to other aspects of human cognition.

On successful completion you will be able to:

• The ability to explain contemporary issues concerning the relationship between human language and the brain in light of scholarly theory and empirical work in the cognitive sciences, and to critique popular or prejudicial claims about the evolution and nature of language from an informed and evidence-based perspective.

• The ability to analyse the strengths and weaknesses of competing explanations and theories of brain and language: specifically, the capacity to evaluate critically, integrate, and apply carefully key concepts related to language, the mind/brain, and culture in relevant areas of social policy and political theory, education, and the cognitive sciences.

• The ability to apply findings from empirical research on brain and language, relating to current data, theories, and policy implications, to real-world contexts and debates about the complex neural bases of human linguistic capacities.

Delivery and Resources

The lectures will be fully online via iLearn, with interactive activities, and each topic in the course will be delivered by experts in the field of cognitive science. In addition students will attend face-to-face tutorials on a fortnightly basis.

It is essential that students have adequate access to the internet as most of the course material and activities are accessed online in the form of:

• video interviews
• audio and video lectures
• online activities and quizzes
• online database research
• participating in online discussion forums
Access to a reasonably fast internet connection would be ideal, given the large amount of video content. Also, please note that in order to access Resources and Activities in your online unit, you will need a browser such as Firefox or Chrome. iLearn will operate on the following browsers, it is recommended that you upgrade your browser to the most recent version:

- Firefox
- Chrome
- Safari
- Internet Explorer 8 or later

**Unit Schedule**
To be advised.

**Policies and Procedures**
Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:


In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

**Student Support**
Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at: [http://students.mq.edu.au/support/](http://students.mq.edu.au/support/)

**UniWISE provides:**

- Online learning resources and academic skills workshops [http://www.students.mq.edu.au/support/learning_skills/](http://www.students.mq.edu.au/support/learning_skills/)
- Personal assistance with your learning & study related questions.
- The Learning Help Desk is located in the Library foyer (level 2).
- Online and on-campus orientation events run by Mentors@Macquarie.
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
Details of these services can be accessed at http://www.student.mq.edu.au/ses/.

IT Help
If you wish to receive IT help, we would be glad to assist you at http://informatics.mq.edu.au/help/.

When using the university's IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students and it outlines what can be done.

Graduate Capabilities

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 outcome

• The ability to explain contemporary issues concerning the relationship between human language and the brain in light of scholarly theory and empirical work in the cognitive sciences, and to critique popular or prejudicial claims about the evolution and nature of language from an informed and evidence-based perspective.

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

• The ability to analyse the strengths and weaknesses of competing explanations and theories of brain and language: specifically, the capacity to evaluate critically, integrate, and apply carefully key concepts related to language, the mind/brain, and culture in relevant areas of social policy and political theory, education, and the cognitive sciences.

• The ability to apply findings from empirical research on brain and language, relating to current data, theories, and policy implications, to real-world contexts and debates about the complex neural bases of human linguistic capacities.

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

• The ability to explain contemporary issues concerning the relationship between human language and the brain in light of scholarly theory and empirical work in the cognitive sciences, and to critique popular or prejudicial claims about the evolution and nature of language from an informed and evidence-based perspective.

• The ability to apply findings from empirical research on brain and language, relating to current data, theories, and policy implications, to real-world contexts and debates about the complex neural bases of human linguistic capacities.

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 outcomes

• The ability to explain contemporary issues concerning the relationship between human language and the brain in light of scholarly theory and empirical work in the cognitive
sciences, and to critique popular or prejudicial claims about the evolution and nature of
language from an informed and evidence-based perspective.

- The ability to analyse the strengths and weaknesses of competing explanations and
theories of brain and language: specifically, the capacity to evaluate critically, integrate,
and apply carefully key concepts related to language, the mind/brain, and culture in
relevant areas of social policy and political theory, education, and the cognitive sciences.