COGS202

Brain and Language

S1 Day 2015

Department of Cognitive Science

Contents

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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 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

Name	Weighting	Due
Online Quizzes	15%	During Semester
Participation	5%	During Semester
Written Essay	40%	10:00, 08/05/2015
Formal Exam	40%	Examination Period

Online Quizzes

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.

Participation

Due: **During Semester**
Weighting: **5%**

Initiation of and active participation in online discussions.

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.

Written Essay

Due: **10:00, 08/05/2015**
Weighting: **40%**

The research report will involve a critical evaluation of evidence and theory pertaining to the
nature of language, its instantiation in the brain, 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.

Formal Exam

Due: **Examination Period**
Weighting: **40%**

Formal end of semester exam.

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.

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

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:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

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

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) 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

IT Help

For help with University computer systems and technology, visit 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.

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:

Assessment tasks

- Participation
- Written Essay

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:

Assessment task

- Participation

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:

Assessment task

- Participation

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.

Assessment tasks

- Online Quizzes
- Written Essay
- Formal 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

- 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

- Online Quizzes
- Participation
- Written Essay
- Formal 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:

Assessment tasks

- Online Quizzes
- Written Essay

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:

Assessment tasks

- Participation
- Written Essay