PSYC3012 – Cognition, Language & Thought
Unit of Study Outline

Unit of Study Code: PSYC3012

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Note: Always use your own University email address when you contact staff.

Format of Unit: 2 x 1 hour lectures/week x 13 weeks
1 x 2 hour tutorial for 10 weeks

Credit Point Value: 6 Credit Points

Prerequisites: PSYC (2013 or 2113) and PSYC (2012 or 2112)

Time Commitment: 4 hours face to face per week; 8 hours private study per week
(including up to 1 hour preparation for each tutorial)

Attendance
The Faculty of Science has a minimum 80% attendance requirement for a student to pass any unit of study.

Lectures: Audio recordings are made of most lecture content and most slides are posted online. However, unavoidable technical problems with recordings sometimes occur and lectures often include demonstrations and examples that will not be available or accessible in online materials. Recordings are intended to be used for revision or to catch up on occasional, unavoidable absences. They are not designed to substitute for lecture attendance.

Tutorials: The tutorial program is designed to complement the lecture content by elaborating examples of issues raised in lectures, allowing students to gain hands-on experience of major experimental procedures and providing opportunities for discussion and questions. Your assignments will also depend on activities conducted within tutorials and you will sometimes work in groups with other students in your tutorial class. Tutorial attendance and participation is recorded and contributes to assessment. It is therefore very important that you attend your allocated tutorial class to be marked as present. If you are unable to attend your allocated tutorial because of illness or exceptional circumstances, inform your tutor of the reasons for your absence and whether you attended another tutorial class that week – do not rely on tutors checking whether you attended another class when you are absent from your allocated tutorial. Do not submit Special Consideration for missed tutorials – talk to your tutor.
About this course
PSYC3012 is a selective 3000 unit that contributes to completion of either a major in Behavioural Science or a program in Psychology. The unit extends the theories and methods of investigating memory and attentional processes discussed in the cognitive psychology strand of PSYC2013 to consider a number of domains of higher cognitive processing. The first half of the unit will focus on language processing and consider the processes involved in spoken language perception and comprehension, and reading in both children and adults. The second half of the unit deals with the cognitive processes involved in skilled behaviour including reasoning and decision-making, and the acquired perceptual skills underlying recognition of objects and faces. The practical program will expose students to a variety of the research methods used to investigate higher cognitive processes, develop their understanding of how these methods can be used to investigate hypotheses about mental processes and consider applications of cognitive research to real-world problems and issues.

SYLLABUS
Psycholinguistics
Issues in speech perception and language acquisition; theories of lexical organization and retrieval.
Language comprehension: syntax and morphology; processing of sentences, text and discourse
Developmental language dysfunctions: implications of Autism, Williams Syndrome and Specific Language Impairment for understanding the relationship between language and other cognitive abilities.
Specific Reading Disability: diagnosis, causes, implications for understanding success and failure in learning to read and for methods of reading instruction
Issues in skilled visual word recognition and reading: differences between spoken and written language; dual route, interactive and connectionist theories of lexical retrieval; word recognition and reading comprehension

Skilled behaviour, expertise and reasoning
Reasoning: When and why do logic and human reasoning sometimes diverge? What conditions may encourage reasoning errors? theories of reasoning;
Cognitive determinants of skilled behaviour: attention, automaticity and control; declarative and procedural memory; stages of skill acquisition; implicit learning
Expertise: How do experts and novices differ? the role of representation and working memory in expertise; talent vs practice as the basis of expertise; theories of skill acquisition; how do you become an expert? Integrating reasoning and skilled behaviour

Visual cognition
Mental imagery: Similarities and differences between perception and imagery.
Object recognition: Marr’s theory of object recognition; Biederman’s Recognition-by-components theory; object-centred vs. viewer-centred representations; Neurobiology of object recognition.
Object vs face recognition: Are faces special? Holistic vs. part-based representations. The role of expertise in face recognition; Neurobiology of face recognition.

Where you can get more information
If you have questions, you should first look for the answer in this Unit of Study outline and other items posted on the eLearning site for PSYC3012. You should regularly check the eLearning site for notices, detailed information about assessment tasks and copies of lecture and tutorial notes. Lecturers, tutors and administrative staff will not answer emails about information that is already available in these sources. Questions about PSYC 3012 that are not addressed in these sources should be directed to the Co-ordinator or your tutor. For other questions, contact the Psychology Education Support team: psychology.ugsupport@sydney.edu.au Please ensure when you send an email, that you do so from your university email account, and that you include your name and SID. Students can expect a response within 3 business days.
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<th>WEEK (beginning)</th>
<th>LECTURES</th>
<th>TUTORIALS</th>
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| 1 (5/3)         | Course overview and administrative issues  
1. Introduction to language psycholinguistics (SA)  
2. Spoken language recognition (SA) | NO TUTORIALS |
| 2 (12/3)        | 3. Language acquisition (SA)  
4. Models of spoken word identification | PRAC REPORT DATA COLLECTION INSTRUCTIONS FOR DEBATE  
• Speech perception and word recognition |
| 3 (19/3)        | 5&6. Sentence and discourse processing (SA) | • Bilingualism  
• Class time for debate preparation |
| 4 (26/3)        | 7&8. Developmental language dysfunctions; Reading disability (SA) | IN-CLASS DEBATE  
• Developmental disorders |

**NON-TEACHING WEEK**

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| 5 (9/4)         | 9 & 10. Theories and issues in skilled reading (SA) | RESEARCH REPORT INSTRUCTIONS  
• Teaching reading |
| 6 (16/4)        | 11 & 12. Reading development and reading instruction (SA) | • Computational models |
| 7 (23/4)        | 13. Introduction to skilled behaviour (BB)  
14. How do experts and novices differ? (BB) | • Implicit learning & Skill |
| 8 (30/4)        | 15. Changes in representation with skill (BB)  
16. Does acquiring a skill take 10,000 hours? (BB) | • Skill acquisition |
| 9 (7/5)         | 17. What determines your limits? (BB)  
18. Introduction to Reasoning (BB) | • Reasoning 1 |
| 10 (14/5)       | 19. Theories of Reasoning 1 (BB)  
20. Theories of Reasoning 2 (BB) | • Reasoning 2  
**RESEARCH REPORT DUE Thursday 17th May** |
| 11 (21/5)       | 21. Bayesian reasoning (BB)  
22. Reasoning and skill – Dual process? (BB) | NO TUTORIALS |
| 12 (28/5)       | 23. Perception and Imagery (TC)  
24. Object recognition (TC) | • Face recognition |
| 13 (4/6)        | 25. Objects and faces (TC)  
26. Face recognition (TC) | NO TUTORIALS |

SA=Sally Andrews; BB=Bruce Burns; TC=Tom Carlson
# Completion of these assessments is compulsory to pass this unit. Students who fail to complete these components will receive an Absent Fail (AF), regardless of their marks in other assessments.

Details of the assessment criteria for the debate, critique and research report will be provided with the instructions for each assignment. The School of Psychology’s general criteria for assessing written work are available at: [http://sydney.edu.au/science/psychology/current_students/doc/general_grade_criteria.pdf](http://sydney.edu.au/science/psychology/current_students/doc/general_grade_criteria.pdf)

**Late penalties**
You will receive a penalty of 5% of the maximum value of the assignment (5 marks / 100) for each calendar day or part thereof that it is submitted after your due date. Submissions will not be accepted after the closing date of the assignment.

**Replacement Research Report**: The Research Report is a compulsory assessment. If you do not submit your report by the closing date, you will be required to complete an alternative assignment on a different topic to satisfy this course requirement. Unless you have applied for special consideration and had an extension approved till after the closing date, you will not receive a mark for the alternative assignment but it will be evaluated to determine whether it represents a serious attempt at the alternative assignment topic. Submissions that are not assessed as a serious attempt (e.g., wrong topic, too short, missing sections) will receive an Absent Fail (AF) grade.

**Replacement final exam** Students will only be eligible to sit for a replacement final exam if they have successfully applied for special consideration/special arrangements.
Contesting Marks

Students do not have an automatic right to request re-marking of class work or exam papers, but they are encouraged to discuss the assessment of their work with members of the teaching staff. Before doing so, students must make sure they have read and understood any written comments already supplied by the marker.

The following remarking/appeal process must be initiated within 3 weeks of students being notified on Blackboard that assignments are ready for collection.

Students who are dissatisfied with some aspect of their assessment should:

- First consult the marker (usually their tutor), who will provide feedback for the given mark. If the tutor was not the marker of the assessment and cannot supply sufficient feedback, the Unit co-ordinator of the relevant Unit will direct them to the staff member responsible for the assessment.
- If the student is not satisfied, they should provide a written case explaining why they believe the work should be re-marked and approach the Unit co-ordinator with this written case. This must be done within two weeks of receiving your marked assignment. The Unit co-ordinator may agree and allow the work to be re-marked. Note: The new mark may be lower than the original mark, in which case the new mark will stand.
- If the Unit co-ordinator does not believe the work should be re-marked, or if after re-marking, the student still believes that the work has been improperly assessed, s/he should address such concerns in writing to the Associate Head of Teaching and Learning. Letters to the Associate Head Education should be emailed directly.

Normally, the Associate Head of Education will consider re-marking of submissions only if both the following are true:

- The student has discussed the reasons for their mark with the staff member(s) responsible for the assessment.
- The student clearly establishes, in writing, reasons for receiving a mark higher than that awarded, taking into account the feedback they have received from the previous marker(s).

Please note that the new mark may be lower than the original mark, in which case the new mark will stand.

Disruptions to your study

If your assessments are disrupted by illness or misadventure or unavoidable community commitments, apply for Special Consideration or Special Arrangements online here: [http://sydney.edu.au/current_students/special_consideration/index.shtml](http://sydney.edu.au/current_students/special_consideration/index.shtml)

If you have (or develop) a continuing issue, register with Disability Services here: [www.sydney.edu.au/disability](http://www.sydney.edu.au/disability)

Types of disabilities include (but are not limited to): Anxiety, Arthritis, Asthma, Autism, ADHD, Bipolar disorder, Broken bones, Cancer, Cerebral palsy, Chronic fatigue syndrome, Crohn’s disease, Cystic fibrosis, Depression, Diabetes, Dyslexia, Epilepsy, Hearing impairment, Learning disability, Mobility impairment, Multiple sclerosis, Post-traumatic stress, Schizophrenia, Vision impairment.

In this unit of study Simple Extensions are not granted. Apply formally for special consideration or via Disability services if you require any extension.

Student Code of Conduct

Students at the University of Sydney are bound by a Code of Conduct, which can be found here: [http://sydney.edu.au/policies/showdoc.aspx?recnum=PD0C2011/215&RendNum=0](http://sydney.edu.au/policies/showdoc.aspx?recnum=PD0C2011/215&RendNum=0)

University Email

Check your University email on a regular basis, or forward your University email to an address you do check regularly. All electronic University communication will be sent to your University email address. Always use your University email when contacting staff in this course. Find a login for your email, eLearning site, Sydney Student (Enrolment) and Timetable and much more here: [https://sydney.edu.au/students/](https://sydney.edu.au/students/)
Graduate Qualities and Student Learning Outcomes for Cognition Language and Thought

Graduate Qualities are the generic skills, abilities and attributes that students should acquire during their university experience. The School of Psychology is committed to providing an environment to promote these qualities. This unit is structured around the graduate qualities associated with the scientist-practitioner model, the basis for the training of psychologists in Australia and internationally. This unit of study will provide students with generalized, transferable skills that will also be useful in careers outside psychology.

The following graduate attributes and student learning outcomes will be developed through lectures, practical classes and assessment activities. They will be assessed in the two written assessments, participation in practical classes and in the final examination.

Disciplinary expertise:

Knowledge and Understanding of cognitive psychology and psycholinguistics
Display basic knowledge and understanding major concepts, theoretical perspectives, empirical findings, and historical trends in cognitive psychology and psycholinguistics

Student learning outcomes:
(i) To stimulate an interest in the contribution of cognitive psychologists to understanding the cognitive processes involved in language abilities, skilled behaviour and reasoning.
(ii) Ability to describe, explain and evaluate research studies examining cognitive processes involved in language and skilled behaviour
(iii) Ability to describe a number of developmental language disorders, and to understand the principles of skilled behaviour that differentiate experts from novices in a range of areas from motor skills to reading to reasoning.

Broader skills:

(1) Information and digital literacy
Develop the ability to locate, collect, interpret, evaluate, analyse, manage, integrate, create and convey information using appropriate resources, tools, methods and strategies.

Student learning outcomes:
(i) To develop a critical understanding of the major methods of research in these areas.
(ii) To critically assess major theories and research findings in these areas.
(iii) To understand, apply and evaluate basic research methods in cognitive psychology and psycholinguistics, including research design, data analysis and interpretation, and the appropriate use of technologies.
(iv) Use basic web-search, word-processing, database, spreadsheet, and data analysis programs.
(v) Understand issues in the design and conduct of basic studies to address psychological questions: formulating research questions; undertaking literature searches; critically analysing theoretical arguments and empirical studies; forming testable hypotheses; operationalising variables; choosing an appropriate methodology; making valid and reliable measurements; analysing data and interpreting results; and writing research reports.

(2) Critical thinking and problem solving skills
Respect and use critical and creative thinking, sceptical inquiry, and the scientific approach to solve problems related to language, thought and behaviour.

Student learning outcomes:
(i) Demonstrate an attitude of critical thinking that includes persistence, open-mindedness, and intellectual engagement.
(ii) Evaluate the quality of information, including differentiating empirical evidence from speculation.
(iii) Evaluate issues and behaviour using different theoretical and methodological approaches.
(iv) Use reasoning and evidence to recognise, develop, defend, and criticise arguments and persuasive appeals.

(3) Communication Skills
Communicate effectively in a variety of formats in a manner that is appropriate to audience and context

Student learning outcomes:
(i) Write a standard research report using American Psychological Association (APA) structure and formatting conventions.
(ii) Write effectively in a variety of other formats (e.g., essays, critiques, popular media) and for a variety of purposes (e.g., informing, analysing, arguing).
(iii) Demonstrate effective oral communication skills in various formats (e.g., debate, group discussion, class presentation) and for various purposes.
(iv) Collaborate effectively, demonstrating ability to: work with groups to complete projects within reasonable timeframes; manage conflicts appropriately and ethically.

Cultural competence
Work productively, collaboratively and openly across diverse groups and across cultural boundaries. Act ethically and professionally; understand the complexity of sociocultural, linguistic and international diversity.

Student learning outcomes:
(i) Recognise and respect social, cultural, linguistic, spiritual and gender diversity.
(ii) Use information in an ethical manner (e.g., acknowledge and respect the work and intellectual property rights of others through appropriate citations in oral and written communication)
(iii) Be able to recognise and promote ethical practice in research, including research with populations with cognitive impairment.
(iv) Promote evidence-based approaches to understanding behaviour.

Interdisciplinary effectiveness
Understand and apply psychological principles in interdisciplinary contexts; integrate and synthesise multiple viewpoints to work effectively across disciplinary boundaries.

Student learning outcomes:
(i) To develop an awareness of the applications of the theories and research findings in cognitive psychology and psycholinguistics to a range of professional contexts.
(ii) Apply psychological concepts, theories, and research findings to solve social and personal problems in everyday life and in society.
(iii) Understand major areas of applied cognitive psychology and psycholinguistics

Academic Honesty
While the University is aware that the vast majority of students and staff act ethically and honestly, it is opposed to and will not tolerate academic dishonesty or plagiarism and will treat all allegations of dishonesty seriously.

All students are expected to be familiar and act in compliance with the relevant University policies, procedures and codes, which include:
- Academic Honesty in Coursework Policy 2015
- Academic Honesty Procedures 2016
- Code of Conduct for Students
- Research Code of Conduct 2013 (for honours and postgraduate dissertation units)

They can be accessed via the University’s Policy Register: http://sydney.edu.au/policies (enter “Academic Honesty” in the search field).

Students should never use document-sharing sites and should be extremely wary of using online “tutor” services. Further information on academic honesty and the resources available to all students can be found on the Academic Integrity page of the University website: http://sydney.edu.au/elearning/student/EI/index.shtml

Academic Dishonesty and Plagiarism

Academic dishonesty involves seeking unfair academic advantage or helping another student to do so. You may be found to have engaged in academic dishonesty if you:
- Resubmit (or “recycle”) work that you have already submitted for assessment in the same unit or in a different unit or previous attempt;
Use assignment answers hosted on the internet, including those uploaded to document sharing websites by other students.

Have someone else complete part or all of an assignment for you, or do this for another student.

Except for legitimate group work purposes, providing assignment questions and answers to other students directly or through social media platforms or document (“notes”) sharing websites, including essays and written reports.

Engage in examination misconduct, including using cheat notes or unapproved electronic devices (e.g., smartphones), copying from other students, discussing an exam with another person while it is in progress, or removing confidential examination papers from the examination venue.

Engage in dishonest plagiarism.

Plagiarism means presenting another person’s work as if it is your own without properly or adequately referencing the original source of the work.

Plagiarism is using someone else’s ideas, words, formulas, methods, evidence, programming code, images, artworks, or musical creations without proper acknowledgement. If you use someone’s actual words you must use quotation marks as well as an appropriate reference. If you use someone’s ideas, formulas, methods, evidence, tables or images you must use a reference. You must not present someone’s artistic work, musical creation, programming code or any other form of intellectual property as your own. If referring to any of these, you must always present them as the work of their creator and reference in an appropriate way.

Plagiarism is always unacceptable, regardless of whether it is done intentionally or not. It is considered dishonest if done knowingly, with intent to deceive or if a reasonable person can see that the assignment contains more work copied from other sources than the student’s original work. The University understands that not all plagiarism is dishonest and provides students with opportunities to improve their academic writing, including their understanding of scholarly citation and referencing practices.

Use of similarity detection software

All written assignments submitted in this unit of study will be submitted to the similarity detecting software program known as Turnitin. Turnitin searches for matches between text in your written assessment task and text sourced from the Internet, published works and assignments that have previously been submitted to Turnitin for analysis.

There will always be some degree of text-matching when using Turnitin. Text-matching may occur in use of direct quotations, technical terms and phrases, or the listing of bibliographic material. This does not mean you will automatically be accused of academic dishonesty or plagiarism, although Turnitin reports may be used as evidence in academic dishonesty and plagiarism decision-making processes.

All students commencing their study at the University of Sydney are required to complete the Academic Honesty Education Module (AHEM) which is accessible via Blackboard.

REFERENCES FOR LECTURE MATERIAL

Textbook:

Lecturers will recommend additional references for specific lecture topics in their lectures
Additional references related to practical class work will be provided in tutorial classes

If you want to check definitions of linguistic terms:

The library website has a Psychology page that includes links to Psychology databases, Internet resources, information on tests and more: http://libguides.library.usyd.edu.au/psychology