PSYC 3012 - Cognition, Language & Thought

Unit of Study Code: PSYC3012

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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: Intermediate Psychology units including
PSYC (2013 or 2113) and at least one other Intermediate Psychology
unit from PSYC (2011 or 2111), PSYC (2012 or 2112), PSYC (2014 or
2114).

Assessment: Classwork:

- **Prac report:** 2000 word prac report (30% of the total mark)
  Due Date: **Friday May 11th 2012** (Week 9). The report must be
  submitted both in hardcopy and online.

- **Written prac exercise** based on prac material (10% of total mark).
  Due Date: **Thursday 5th April 2012** (Week 5)

- **Performance in class debate in Week 4** (5% of total)

- **Practical class attendance and participation** (5% of the total mark)
  NB: It is a requirement to pass the course that you attend a minimum
  of 80% of pracs. **IT IS YOUR RESPONSIBILITY TO ATTEND THE
  PRAC YOU ARE ENROLLED IN TO BE MARKED AS PRESENT.** i.e.
  Tutors can not be expected to notify other tutors to confirm your
  attendance if you do not attend your enrolled prac.

**Final Examination:** (50% of the total mark)
Multiple choice and short-answer questions based on lectures, set
readings and material from practical classes

NB You should read the general administrative guidelines for submission of written work,
penalties for late work, assessment criteria, procedures for applying for extensions and
special consideration on the School of Psychology web page (www.psych.usyd.edu.au).
Unit of study general description:
This unit extends the theories and methods of investigating memory and attentional processes discussed in PSYC2013 to consider a number of domains of higher cognitive processing. One strand of the course will focus on language processing and consider the processes involved in spoken language perception, comprehension and production, and reading. The remainder of the course will deal with the cognitive processes involved in reasoning and decision-making. 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.

Graduate Attributes and Student Learning Outcomes for Cognition Language and Thought (PSYC3012)
This course is structured around the graduate attributes associated with the scientist-practitioner model, the basis for the training of psychologists in Australia and internationally. Graduate Attributes are the generic skills, abilities and qualities that students should acquire during their university experience and the School of Psychology is committed to providing an environment to promote these skills. In addition, this unit of study will provide students with generalised and 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.

1: 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 adult language abilities, skilled behaviour and reasoning.
(ii) Ability to describe, explain and evaluate research studies examining the influence of basic word recognition skills on skilled reading.
(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.

2: Research Methods in cognitive psychology and psycholinguistics
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.

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 interpret statistical analyses.
(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 analyse theoretical arguments and empirical studies; form testable hypotheses; operationalise variables; choose an appropriate methodology; make valid and reliable measurements; analyse data and interpret results; and write research reports.
3: Critical Thinking Skills in cognitive psychology and psycholinguistics
Respect and use critical and creative thinking, sceptical inquiry, and the scientific approach to solve problems related to 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.

4: Values in cognitive psychology and psycholinguistics
Value empirical evidence; act ethically and professionally; understand the complexity of sociocultural, linguistic and international diversity and the complexity of research with cognitively/linguistically impaired populations

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.

5: Communication Skills in cognitive psychology and psycholinguistics
Communicate effectively in a variety of formats and in a variety of contexts

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, experimental designs and hypotheses) 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.

6: Learning and the application of cognitive psychology and psycholinguistics
Understand and apply psychological principles to personal and social issues.

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

Evidence of learning:
Assessment will include a 2000 word prac report based on an experiment done in tutorials, a written prac exercise, performance in verbal prac exercises, and active participation in tutorials. At the end of semester, a multiple-choice and short-answer examination will assess knowledge of the entire course focusing particularly on lecture material and assessable readings, but which will include some material exclusively covered in tutorials.
SYLLABUS

Psycholinguistics

Issues in speech perception; theories of lexical organization and retrieval.

Language comprehension and production: syntax and morphology; processing of sentences, text and discourse; theories of word production and speech production; Aphasia: implications for understanding normal and impaired language processing

Developmental language dysfunctions: autism and the role of “theory of mind”; specific reading disability.

Theories of visual word recognition and reading: implications for understanding success and failure in learning to read and for methods of reading instruction

Skilled behaviour, expertise and 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?

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<th>WEEK (beginning)</th>
<th>LECTURES</th>
<th>TUTORIALS</th>
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| 1 (5/3)          | Course overview and introductory matter  
1. Introduction to psycholinguistics (KC)  
2. Spoken languagerecognitionpartone: The segmentation problem and variability (KC) | NO TUTORIALS |
| 2 (12/3)         | 3. Spoken language recognition part two: How we wreck a nice beach (KC)  
4. Sentence comprehension: Beyond trees and garden paths (KC) | PRAC REPORT DATA COLLECTION, INSTRUCTIONS FOR DEBATE Psycholinguistic units across languages |
| 3 (19/3)         | 5. Language comprehension: Beyond words and syntax (KC)  
6. Conversation and conceptualisation (KC) | Speech perception and word recognition demos Debate preparation |
| 4 (26/3)         | 7. A blueprint for the speaker (KC)  
8. Word production: You have hissed all my mystery lectures (KC) | DEBATE Bilingualism and cognition |
| 5 (2/4)          | **Written PRAC EXERCISE DUE Thursday 5th April**  
9. Cognitive neuropsychology and aphasia: When words fail (KC)  
10. Developmental language dysfunctions (SA) | DATA RETURN & REPORT INSTRUCTIONS Language impairments |
| (9/4)            | **NON-TEACHING WEEK** | |
| 6 (16/4)         | 11. Specific reading disability (SA)  
12. Theories of skilled reading (SA) | Teaching reading |
| 7 (23/4)         | 13. & 14. Theories of skilled reading & reading development (SA) | Comprehension and Categorization (Students in Wednesday 25/4 tutorial go to a different class) |
| 8 (30/4)         | 15. & 16. Reading development & implications for teaching reading (SA) | Connectionist models |
| 9 (7/5)          | **2000 word PRAC REPORT DUE Friday 11th May**  
17. Introduction to skilled behaviour (BB)  
18. Basic concepts in skilled behaviour (BB) | NO TUTORIALS |
| 10 (14/5)        | 19. How do experts and novices differ? (BB)  
20. Determinates of expertise (BB) | Implicit learning & Skill |
| 11 (21/5)        | 21. Theories of skill acquisition and expertise (BB)  
22. Basic concepts in reasoning (BB) | NO TUTORIALS |
| 12 (28/5)        | 23. Theories of Reasoning (BB)  
24. Theories of Reasoning (BB) | Reasoning |
| 13 (4/6)         | 25. Theories of reasoning (BB)  
26. Integrating reasoning and skill (BB) | Reasoning illusions |

KC=Karen Croot; SA=Sally Andrews; BB=Bruce Burns
REFERENCES FOR LECTURE MATERIAL

Textbook:

(In particular Chapters 9-12 & 14)

Some other references (lecturers will indicate which sections are relevant to their lectures, and may recommend additional references for individual lectures)


If you want to check definitions of linguistic terms:

[References for BB, additional references for KC and SA to be announced in lectures]

Additional references related to practical class work will be provided in practical classes
Academic Dishonesty and Plagiarism

1. It is your responsibility to know what academic dishonesty and plagiarism are.

Here is the link to the University’s policy:


Make sure that you understand what counts as academic dishonesty and the various types of plagiarism. The Library’s http://www.library.usyd.edu.au/skills/ ‘Plagiarism and Academic Honesty’ program will help.

2. Note that:

i) the School of Psychology will penalise all submitted work that is plagiarised.

ii) Students should note that all assignments (including group projects) will be run through similarity detecting software. This software detects similarities between (a) your assignment and both print and online sources, and (b) assignments submitted by other students, from both current and previous years. If similarities are found, they will be investigated so as to determine the nature of the plagiarism. See Part 5 of the University’s policy.

Avoiding plagiarism – key points

• Plagiarism is a serious offence and may result in failure in the course. Even where students are completing an exercise together, each student must submit separate written work. Incorporation of any material from another student’s assignment is regarded as plagiarism.

• In writing essays or reports to meet coursework requirements, you should use your own words. In some contexts (e.g., theoretical research) it is appropriate to use an occasional quotation. This should be indicated in the conventional way by enclosing the passage within quotation marks and by providing a precise (page number) reference for the source of the quote. In many contexts, especially reports of empirical work, quotations are best avoided.

• “Using your own words” means that you should not borrow from the writing of others – whether from fellow students or published authors. For example, it is not acceptable to base an essay on text from various sources that you have then edited to some degree – even if you cite these sources. First of all, there is the ethical issue arising from the dishonesty of presenting as your own work something which is essentially the work of others. In addition, there are good educational reasons for avoiding this, even where you feel that someone else has expressed some idea far more clearly than you could. One reason is that you must learn to express yourself clearly in writing; like most other skills, this only comes with practice. Another, is the failure to understand information or ideas at all thoroughly if all you have done is reproduce (with some editing) what someone else has written about the topic.

• When you express in your own words what you have learned from various sources, you should cite each source. The standard convention for most written work in psychology is to list references at the end of your essay or report, rather than, for example, to use footnotes. To express some idea without giving a citation implies that it is your own idea. Therefore, if it is in fact an idea obtained from someone else, this needs to be acknowledged. Listing a set of sources implies that you have read them all. Therefore, you should list as references only those you have actually read. If you are depending on a secondary source, then make this clear, e.g., ... salivary conditioning (Pavlov, 1927; cited in Mazur, 1998).
• The points made here also apply to non-textual material. For example, graphs or tables of data included in a report should be your own work and not copied from others. Very occasionally you may need to ‘quote’ a figure from some other source; if you do so, you should make its origin quite clear.

• In general, avoid letting other students use your work for any kind of assessment. On the rare occasion where this may be appropriate, make sure that the other student acknowledges your contribution as the original author.

• In some cultures, students show their respect for a teacher by copying what the teacher has said or written. In Australian University education, copying a teacher (even if paraphrasing) is plagiarism if the source is not cited.
Research and resource support for Psychology students

The University of Sydney Library has 12 libraries in different locations, on different subjects with different facilities. Fisher Library is where you will find the physical collection of most relevance to your Psychology studies. Fisher Library is located on Eastern Ave, Camperdown campus. We also have loads available online – find us at sydney.edu.au/library/

Matthew Davis is the Faculty Liaison Librarian for Psychology. Matthew is available to help you find and use library resources for your assignments or research. You can email him at library.psychology@sydney.edu.au or phone on 9351 3629. The Psychology Librarian is located at Badham Library, level 1, Badham Building, Science Rd, Camperdown Campus.

Psychology books in high demand

The 2 hour collection is located on Level 3 of Fisher Library. Most of your required and recommended items from the reading lists will be here. You can find a list of your required readings in the catalogue by searching under your Unit of Study code http://opac.library.usyd.edu.au/search/r Some material in the list is also available to read online.

Psychology subject guide

There is a comprehensive subject guide that includes links to psychology databases, internet resources, information on tests and measurements, referencing guides, and much more. Take a look at http://libguides.library.usyd.edu.au/psychology You can also enrol in free research, database and EndNote training classes on this site.

Need a refresher after the long vacation?

Watch and listen to these online learning objects and get back up to speed with information literacy skills on topics such as research, essay writing and referencing.
http://www.library.usyd.edu.au/skills/