PSYC 3012 - Cognition, Language & Thought

Unit of Study Code: PSYC3012

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Tutors: Dr Karen Croot Contact details as above
Dr Bruce Burns Contact details as above
TBA

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: Monday May 10th 2010 (Week 10). The report must be submitted both in hardcopy and online.

- Written prac exercise based on prac material (10% of total mark).
  Due Date: Thursday 1st April 2010 (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.
(iv) 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?

## TIMETABLE

<table>
<thead>
<tr>
<th>WEEK (beginning)</th>
<th>LECTURES</th>
<th>TUTORIALS</th>
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</thead>
<tbody>
<tr>
<td>1 (1/3)</td>
<td>1. &amp; 2. Speech perception &amp; spoken word recognition (KC)</td>
<td>NO TUTORIALS</td>
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<tr>
<td>2 (8/3)</td>
<td>3 &amp; 4. Spoken word recognition and sentence comprehension (KC)</td>
<td>PRAC REPORT DATA COLLECTION, INSTRUCTIONS FOR DEBATE &amp; WRITTEN EXERCISE Assessing reading and spelling</td>
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<tr>
<td>3 (15/3)</td>
<td>5 &amp; 6 Discourse comprehension and conversation (KC)</td>
<td>Bilingualism</td>
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<tr>
<td>4 (22/3)</td>
<td>7. &amp; 8 Sentence and word production (KC)</td>
<td>DEBATE Language acquisition</td>
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<tr>
<td>(5/4)</td>
<td>NON-TEACHING WEEK</td>
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<tr>
<td>6 (12/4)</td>
<td>11. Specific reading disability (SA) 12. Theories of skilled reading (SA)</td>
<td>DATA RETURN &amp; REPORT INSTRUCTIONS Language functions and dysfunctions</td>
</tr>
<tr>
<td>7 (19/4)</td>
<td>13. &amp; 14. Theories of skilled reading &amp; reading development (SA)</td>
<td>Teaching reading</td>
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<tr>
<td>8 (26/4)</td>
<td>15. &amp; 16. Reading development &amp; implications for teaching reading (SA)</td>
<td>NO TUTORIALS</td>
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<tr>
<td>9 (3/5)</td>
<td>17. &amp; 18. Basic concepts in skilled behaviour (BB)</td>
<td>Language and Implicit learning</td>
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<tr>
<td>10 (10/5)</td>
<td>2000 word PRAC REPORT DUE Monday 10th May 19. &amp; 20. How do experts and novices differ? (BB)</td>
<td>NO TUTORIALS</td>
</tr>
<tr>
<td>11 (17/5)</td>
<td>21. Theories of skill acquisition and expertise (BB) 22. Basic concepts in reasoning (BB)</td>
<td>Skill &amp; Expertise</td>
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<tr>
<td>12 (24/5)</td>
<td>23. &amp; 24. Reasoning phenomena (BB)</td>
<td>Reasoning</td>
</tr>
<tr>
<td>13 (31/5)</td>
<td>25. Theories of reasoning (BB) 26. Integrating reasoning and skill (BB)</td>
<td>Reasoning illusions</td>
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KC=Karen Croot; SA=Sally Andrews; BB=Bruce Burns
REFERENCES FOR LECTURE MATERIAL

Textbook:
(In particular Chapters 10-14 & 16)

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 to be announced]

Additional references related to practical classwork will be provided in practical classes
Plagiarism is not permitted

i) Are you sure you know what plagiarism is?

Please refer to the University policy on plagiarism:


ii) The School of Psychology will penalise all submitted work that is plagiarised;

iii) The School of Psychology is using software to detect all forms of plagiarism.
THE UNIVERSITY OF SYDNEY LIBRARY

The University of Sydney Library is a distributed system of libraries with a collection of over 5 million items. Fisher Library has the most resources relevant to Psychology and is located on Eastern Avenue, Camperdown Campus.

http://sydney.edu.au/library

Faculty Liaison Librarian

Your Faculty Liaison Librarian supports the teaching, learning and research needs of staff, students and researchers for the School of Psychology. Contact details are as follows:


Psychology Guide

Includes links to Psychology databases, internet resources, information on tests and more.

http://libguides.library.usyd.edu.au/psychology

Psychology material in high demand

Reserve (located on Level 2 of Fisher Library) is a 2 hour loan collection of required and recommended items on Psychology reading lists. Reading list material can be searched by unit of study or lecturer via the catalogue:

http://opac.library.usyd.edu.au/search/r