UNSW Course Outline

PSYC3211 Cognitive Science - 2024

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General Course Information

Course Code : PSYC3211
Year : 2024
Term : Term 1
Teaching Period : T1
Is a multi-term course? : No
Faculty : Faculty of Science
Academic Unit : School of Psychology
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course will provide students with an advanced-level understanding of theories, methods and controversies in four key areas of cognitive psychology: 1) Judgment and Decision-making; 2) Theory and Models; 3) Categorisation and Reasoning; and (4) Intelligence and Thinking. As part

of the course, students will develop a Research Proposal that investigates a novel issue in cognitive science.

This course is intended for students who are interested in cognitive science. Lectures are delivered in person and recorded for revision purposes. Most of the in-person tutorials are in support of the Research Proposal: students will work in groups to develop and present a proposal. Other tutorials will provide an opportunity for in-depth discussion of course topics. The course also features two short online modules that pursue questions raised in the lectures.

Course Aims

The aim of this course is to provide students with an advanced-level understanding of the current theories, methods and controversies in four key areas of cognitive science: 1) Judgment and Decision-making; 2) Theory and Models; 3) Categorisation and Reasoning; and (4) Intelligence and Thinking. It will equip students with a broad understanding of the core principles of cognition, and give them the tools to think about how to improve reasoning, decision and memory processes across a range of applied areas (e.g., medical, legal, environmental and financial).

Relationship to Other Courses

This course provides an advanced treatment of cognitive psychology. It follows on, and assumes knowledge, from PSYC2071 Perception and Cognition.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Describe and evaluate historical perspectives, key topics and empirical research in cognitive science.
CLO2 : Describe, apply and evaluate research methods used in cognitive science.
CLO3 : Develop and critique scientific arguments by evaluating and synthesising evidence from the literature.
CLO4 : Communicate scientific information and experimental results effectively in written and oral formats.
CLO5 : Describe how knowledge can be synthesised across key topics in cognitive science in order to solve applied problems.
CLO6 : Collaborate ethically and efficiently in a group in order to develop a research proposal addressing a novel question in cognitive science.

Course Learning Outcomes	Assessment Item
CLO1 : Describe and evaluate historical perspectives, key topics and empirical research in cognitive science.	• Mid-session test • Final exam
CLO2 : Describe, apply and evaluate research methods used in cognitive science.	• Research report and presentation • Mid-session test • Final exam
CLO3 : Develop and critique scientific arguments by evaluating and synthesising evidence from the literature.	• Research report and presentation • Mid-session test • Final exam
CLO4 : Communicate scientific information and experimental results effectively in written and oral formats.	• Research report and presentation
CLO5 : Describe how knowledge can be synthesised across key topics in cognitive science in order to solve applied problems.	• Mid-session test • Research report and presentation • Final exam
CLO6 : Collaborate ethically and efficiently in a group in order to develop a research proposal addressing a novel question in cognitive science.	• Research report and presentation

Learning and Teaching Technologies

Moodle - Learning Management System | Echo 360

Learning and Teaching in this course

This course provides an advanced treatment of cognitive psychology. It follows on, and assumes knowledge, from PSYC2071 Perception and Cognition.

Lectures: The primary objective of the lecture course is to investigate cognition in depth and to relate different areas of cognition to each other. You should come away from the course with a good understanding of the main issues in current research on categorisation, reasoning, memory, intelligence and decision making. The main aim is to provide a conceptual understanding of the issues. The mid-session and final exam will test this understanding. We shall attempt to pose questions in this exam that test your conceptual understanding rather than your ability to reproduce the lecture notes.

Tutorials: The tutorials will be a combination of demonstrations of 'classic' experimental phenomena, hands on implementation of computational tools and the opportunity to devise, implement and analyse an experiment. As such the tutorials teach specific skills that are of central importance to cognitive scientists. These are: 1) to critically evaluate empirical findings

and journal articles; 2) to design novel tests of existing theories and to implement those designs in laboratory-based experiments.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Mid-session test Assessment Format: Individual	15%	Start Date: Not Applicable Due Date: Not Applicable
Research report and presentation Assessment Format: Group	40%	Due Date: 18/04/2024 11:59 PM Post Date: 02/05/2024 11:30 PM
Final exam Assessment Format: Individual	45%	

Assessment Details

Mid-session test

Assessment Overview

A mid-session test in Week 4 will be worth 15% of the total mark. The test will be conducted in tutorial/laboratory classes. This will assess the course content from the lectures on the first topic taught in the course (Judgment and Decision Making). It will be a 30-minute test comprising Multiple Choice Questions, targeted at assessing your understanding of material on Judgment and Decision Making, and your ability to evaluate theories and evidence in this area. Feedback will be provided within 10 working days of the due date.

Course Learning Outcomes

- CLO1 : Describe and evaluate historical perspectives, key topics and empirical research in cognitive science.
- CLO2 : Describe, apply and evaluate research methods used in cognitive science.
- CLO3 : Develop and critique scientific arguments by evaluating and synthesising evidence from the literature.
- CLO5 : Describe how knowledge can be synthesised across key topics in cognitive science in order to solve applied problems.

Assignment submission Turnitin type

Not Applicable

Research report and presentation

Assessment Overview

The Research Proposal project will begin in the tutorial in Week 3. In this project you will work in groups to design an experiment examining a topic relating to the Judgment and Decision Making section of the course (this topic will be discussed in the Week 3 tutorial). You will write up an INDIVIDUAL research proposal in which you describe the experiment, the results that you would expect (and how you would analyse them), and the implications of the expected findings. The written research proposal document has a limit of 2,000 words, and will be due in Week 10. You will also give an oral presentation on your proposal in groups, during the Week 9 tutorial. Finally, you will be asked to perform peer evaluation of the contributions to group work made by each member of your group. The peer evaluation document will be due in Week 10. The written report is worth 30% of the total mark, the presentation is worth 8%, and peer evaluation is worth 2%.

Feedback will be provided within 10 working days of the due date and will be available online via Moodle.

Course Learning Outcomes

- CLO2 : Describe, apply and evaluate research methods used in cognitive science.
- CLO3 : Develop and critique scientific arguments by evaluating and synthesising evidence from the literature.
- CLO4 : Communicate scientific information and experimental results effectively in written and oral formats.
- CLO5 : Describe how knowledge can be synthesised across key topics in cognitive science in order to solve applied problems.
- CLO6 : Collaborate ethically and efficiently in a group in order to develop a research proposal addressing a novel question in cognitive science.

Assessment Length

2000 words

Assessment information

Flexibility in task completion - Short Extension

If you are struggling to meet the deadline for this assessment task, you may apply for a short extension of _2_ days. ***This applies only to the individual, written Research Proposal.***

All short extension applications must be submitted *before* the task's due date.

For details on how to apply, and the conditions on applying, please visit the UNSW Special

[Consideration](#) website.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Final exam

Assessment Overview

The final exam will be worth 45% of the total mark – it will assess your ability to evaluate and synthesise content from topics not assessed by the Mid-Session test. It will comprise Multiple Choice Questions and short answer essay questions. You will be required to answer two short-answer essay questions for each lecture topic (Categorisation and Reasoning; Theory and Models; Intelligence and Thinking). The exam will be run in person, on campus during the UNSW Exam Period, and will be invigilated Feedback is available through inquiry with the course convenor.

To provide you with a chance to practise this short-answer format prior to the exam, in Week 4 we will set an example short-answer essay question, based on the Judgment and Decision-Making section of the course. If answers are submitted prior to the deadline in Week 5, your attempt will be "graded" by tutors and feedback will be provided within two weeks. Please note that the grade for this practice question does not form part of the assessment of this course – it will not contribute to the final grade for PSYC3211, and is provided purely for the purpose of giving you additional feedback on their performance.

Answers that are longer than 800 words will not be graded or receive feedback.

Course Learning Outcomes

- CLO1 : Describe and evaluate historical perspectives, key topics and empirical research in cognitive science.
- CLO2 : Describe, apply and evaluate research methods used in cognitive science.
- CLO3 : Develop and critique scientific arguments by evaluating and synthesising evidence from the literature.
- CLO5 : Describe how knowledge can be synthesised across key topics in cognitive science in order to solve applied problems.

General Assessment Information

Grading Basis

Standard

Requirements to pass course

Achieve a composite mark of at least 50 out of 100.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Judgment & Decision Making 1
	Lecture	Judgment & Decision Making 2
	Lecture	Judgment & Decision Making 3 (pre-recorded online lecture)
	Online Activity	Preparatory quiz for Judgment & Decision Making online module
Week 2 : 19 February - 25 February	Lecture	Judgment & Decision Making 4
	Lecture	Judgment & Decision Making 5 and Q&A
	Online Activity	Judgment & Decision Making Online Module
	Tutorial	Research proposal: Background, design & methods
Week 3 : 26 February - 3 March	Lecture	Categorisation & Reasoning 1
	Lecture	Categorisation & Reasoning 2
	Tutorial	Categorisation & Reasoning practical class
Week 4 : 4 March - 10 March	Lecture	Categorisation & Reasoning 3
	Lecture	Categorisation & Reasoning 4 (pre-recorded online lecture)
	Lecture	Categorisation & Reasoning 5 and Q&A
	Tutorial	Research proposal: Analysis and report writing
Week 5 : 11 March - 17 March	Lecture	Theory, Models & Context 1
	Lecture	Theory, Models & Context 2
	Lecture	Theory, Models & Context 3 (pre-recorded online lecture)
	Assessment	Mid-session test on Judgment & Decision Making
Week 7 : 25 March - 31 March	Lecture	Theory, Models & Context 4
	Lecture	Theory, Models & Context 5 and Q&A
	Tutorial	MONDAY CLASSES ONLY Research proposal: Discussion about research proposals and presentations
Week 8 : 1 April - 7 April	Lecture	Intelligence & Thinking 1
	Lecture	Intelligence & Thinking 2 (pre-recorded online lecture)
	Tutorial	TUESDAY AND WEDNESDAY CLASSES ONLY Research proposal: Discussion about research proposals and presentations
Week 9 : 8 April - 14 April	Lecture	Intelligence & Thinking 3
	Lecture	Intelligence & Thinking 4
	Online Activity	Intelligence & Thinking Online Module
Week 10 : 15 April - 21 April	Lecture	Intelligence & Thinking 5
	Lecture	Intelligence & Thinking 6 and Q&A
	Tutorial	Theory, Models & Context: Discussion of a paper (to be announced), and class feedback on exam short-answer practice.

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

Specific readings will be provided during the course lectures and tutorials

Recommended Resources

A suggested text for the Decision Making component is Newell et al. *Straight Choices: The Psychology of Decision Making, 3rd Edition*

A suggested text for the Intelligence component is: Mackintosh, N. *IQ and Human Intelligence, 2nd Edition*

Additional Costs

None

Course Evaluation and Development

We gather student feedback via myExperience, and each year we have 2-4 "student reps" who provide direct feedback to the course organisers. We have used previous feedback to improve the course, for example:

Previous students told us:
- The word limit for the Research Proposal was too low, making it hard to write an effective report that covered everything they wanted to cover.

We have responded to this feedback by:
- Increasing the word limit for the Research Proposal.

Previous students told us:
- They were not used to the short-answer format used in the final exam.

We have responded to this feedback by:
- Providing a chance to practice answering an example short-answer question, with feedback.

Previous students told us:
- They were unclear on the role of tutorials, many of which were not about going over material from lectures.

We have responded to this feedback by:

- Clarifying the role of tutorials. The main aim of the tutorials in PSYC3211 is not to go over lecture material again. Instead the tutorials are designed to provide additional content, and to teach other skills that are not taught in the lectures. In particular, most of the tutorials are focused on helping you to develop a novel research proposal on a topic in Cognitive Science - i.e., teaching research skills, and showing how research in Cognitive Science is conducted.
- Adding Q and A sessions at the end of each set of lectures to allow students to ask questions about topics in the lectures that they are unclear about.

Previous students told us:

- They had concerns about 'free-riders' in the Research Proposal - group members who did not pull their weight in helping to develop the ideas for the project and/or prepare the presentation.

We have responded to this feedback by:

- Introducing a peer-evaluation component to the grade for the Research Proposal.

Previous students told us:

- They felt that the course was too 'content-heavy' in places.

We have responded to this feedback by:

- Streamlining the sections on Judgment & Decision-Making, Theory, Models & Context, and Intelligence & Thinking - this has resulting in removing two lectures' worth of material in total.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Mike Le Pelley					Yes	Yes
Lecturer	Ben Newell					No	No
	Brett Hayes					No	No
	Christin Schulze					No	No
Tutor	Jake Embrey					No	No
	Zoe Little					No	No
	Samuel Vigouroux					No	No
	Jaimie Lee					No	No

Other Useful Information

Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe, harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.
- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the [UNSW Student Code of Conduct Website](#).

Academic Honesty and Plagarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.
Further information about referencing styles can be located at https://student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.
Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The [Current Students site](#),
- The [ELISE training site](#), and
- The [Use of AI for assessments](#) site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct

Submission of Assessment Tasks

Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Any variations to the above will be explicitly stated in the Course Outline for a given course or assessment task.

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

Special Consideration

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: https://student.unsw.edu.au/special-consideration

Important note: UNSW has a "fit to sit/submit" rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

Faculty-specific Information

Additional support for students

- [The Current Students Gateway](#)
- [Student Support](#)
- [Academic Skills and Support](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [UNSW IT Service Centre](#)
- Science EDI Student [Initiatives](#), [Offerings](#) and [Guidelines](#)