PSYC3011 – Learning and Behaviour

Unit of Study Code: PSYC3011

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Format of Unit: 2 x 1 hour lectures/week x 13 weeks
1 x 2 hour tutorial/week x 10 weeks
Tutorial classes: maximum of 20 students per group

Credit Point Value: 6 Credit Points

Prerequisites: 12 credit points of Intermediate Psychology:

PSYC2011 (or PSYC2111 / PSYC2911)
and at least one other Intermediate Psychology Unit from

Assessment: One 2hr exam (multiple-choice and written-answer questions): 50%
One 2000 word practical report (due before 4PM on Monday, 19th May, 2014): 30%
Tutorial quizzes held throughout semester: 20%
Unit of study general description:

PSYC 3011 addresses the fundamental concepts and more important research findings related to contemporary theories of associative learning in animals and humans. It examines the application of such fundamental research to issues such as drug use, phobias and food choice. It is designed to foster skills in reading primary sources in this area, and provide the opportunity for hands-on experience in research projects in this area.

Graduate Attributes & Student Learning Outcomes.
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, tutorial and assessment activities in particular. They will be assessed primarily in the report, tutorial quizzes, and in the final examination.

1: Core knowledge and understanding

Display basic knowledge and understanding the major concepts, theoretical perspectives, empirical findings, and historical trends in the study of learning and behavior.

Student learning outcomes:

(i) Learn about basic behavioural phenomena that reveal the conditions under which learning occurs and the content of that learning.

(ii) Understand major theoretical models that describe mechanisms for associative learning, and to appreciate the role of theory in the generation of knowledge in learning.

(iii) An appreciation of the historical and current contribution of learning theorists, to the understanding of human and animal behaviour.

(iv) An appreciation for how learning relates to basic motivational processes.

(v) An appreciation of the complex relationship between learning and human cognition.

(vi) Recognise issues specifically related to the study of learning in humans and how simple associative learning theory relates to human behavior in a variety of clinical and everyday settings.
2: Research methods in psychology.

Understand, apply and evaluate basic research methods in learning and behaviour, including research design, data analysis and interpretation.

Student learning outcomes:

(i) An ability to describe, apply and evaluate the different research methods used by learning psychologists.
(ii) Design and conduct basic studies to address psychological questions related to learning and behaviour, including: framing a research question; undertaking a literature review; critically analysing theory and empirical studies; formulate testable hypotheses; operationalise variables; describe an appropriate methodology; analyse data and interpret results; as assessed by the writing of a practical report based on research conducted in class.
(iii) Demonstrate practical skills in laboratory-based human learning research.

3: Critical thinking skills.

Respect and use critical and creative thinking, sceptical inquiry, and the scientific approach to solve problems related to learning and behaviour.

Student learning outcomes:

(i) Apply knowledge of the scientific method in thinking about problems related to behaviour and psychological processes involved in learning in humans and other animals.
(ii) Evaluate the quality of information, including differentiating empirical evidence from speculation, and differentiating between observations of behaviour and conclusions inferred about psychological processes.
(iii) Question claims that arise from myth, stereotype, pseudoscience or untested assumptions.
(iv) Demonstrate an attitude of critical thinking that includes persistence, open-mindedness, and intellectual engagement.

4: Values, research and professional ethics.

Value empirical evidence; act ethically and professionally; and understand the complexity of sociocultural and international diversity.

Student learning outcomes:

(i) Use information in an ethical manner, including acknowledging and respecting the work and intellectual property rights of others through appropriate citations in oral and written communication.
(ii) Promote evidence-based approaches and rigour in the understanding of behaviour.
(iii) Be aware of ethical issues pertaining to the application of learning theory to human behaviour and to human and animal experimentation.
5: Communication skills.

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) Contribute to class discussion and participate in learning demonstrations as experimenter and subject.

Evidence of learning:

Achieving a Pass standard in the Exam demonstrates success in achieving the learning outcomes 1(i-vi), 2(i-ii), 3(i-ii).

Achieving a Pass standard in the Laboratory Report demonstrates success in achieving learning outcomes 1(i-vi), 2(i-ii), 3(i-ii), 4(i) and 5(i).

Achieving a Pass standard in the Tutorial Quizzes demonstrates successful achievement of Outcomes 1(i-vi), 2(i-ii), 3(i-ii).

Learning outcomes 2(iii), 3(iii-iv), 4(ii-iii) and 5(ii) are not directly assessed in PSYC3011.
Tutorial Programme

Starting in Week 2, ten 2-hour tutorials will be held at which students will participate in a variety of research projects and exercises investigating different issues related to associative learning. The 2,000-word report is based on one of these projects. Most tutorial projects involve participation and discussion across at least two tutorials. Further details of this content will be made available to students during semester and students should regularly check the online resources for this unit for tutorial-relevant content. The tutorial program will include projects/exercises on the following:

1. Critical thinking in the context of exam and report writing
2. Computational models of learning
3. Discrimination and categorization
4. Causal learning
5. Homeostasis and drug tolerance
6. Effects of testing on learning and memory
7. Trial spacing and learning

Four tutorial quizzes will be conducted during Weeks 4, 6, 9, and 12 of Semester. The quizzes are multiple-choice format and will assess lecture and tutorial content. Note that the timing of the tutorial quizzes is subject to change and all dates will be confirmed in lectures and online prior to each assessment.

Note: Tutorials will be held in every week of semester EXCEPT weeks 1, 7 and 13.

NOTE: Attendance at the tutorials is compulsory. The quizzes and exam will assess content from both lectures and tutorials, including material covered solely in the tutorial program. The quizzes are worth 20% of the total mark.

NOTE: The research report will be analysed by plagiarism detection software. Further information about submission of the report will be covered in lectures and will be available online.
Lecture Programme

Students are expected to attend two 1-hr lectures each week (weeks 1 to 13). Lectures are at 10am on Mondays and 10am on Wednesdays.

Below is a provisional lecture timetable, showing the title of each lecture and the name of the lecturer (note: the scheduling of topics may change from that shown below).

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lec #</th>
<th>Lecturer</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Mar 3</td>
<td>L 1</td>
<td>Livesey</td>
<td>Introduction to learning and behaviour.</td>
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<tr>
<td></td>
<td>Mar 5</td>
<td>L 2</td>
<td>Boakes</td>
<td>Darwin and mental evolution.</td>
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<tr>
<td>2</td>
<td>Mar 10</td>
<td>L 3</td>
<td>Boakes</td>
<td>Comparative psychology and early Behaviourism.</td>
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<td>3</td>
<td>Mar 17</td>
<td>L 5</td>
<td>Boakes</td>
<td>Skinner’s operant psychology vs associative learning theory.</td>
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<td></td>
<td>Mar 19</td>
<td>L 6</td>
<td>Livesey</td>
<td>The content of conditioning.</td>
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<tr>
<td>4</td>
<td>Mar 24</td>
<td>L 7</td>
<td>Harris</td>
<td>The conditions necessary for conditioning: contiguity.</td>
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<tr>
<td></td>
<td>Mar 26</td>
<td>L 8</td>
<td></td>
<td>The conditions necessary for conditioning: contingency.</td>
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<tr>
<td>5</td>
<td>Mar 31</td>
<td>L 9</td>
<td>Harris</td>
<td>Theories of conditioning: Variations in associability of the CS or US. The Rescorla-Wagner model.</td>
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<td>April 2</td>
<td>L 10</td>
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<td>6</td>
<td>April 7</td>
<td>L 11</td>
<td>Harris</td>
<td>The effects of non-reinforcement: extinction.</td>
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<td></td>
<td>April 9</td>
<td>L 12</td>
<td></td>
<td>Conditioned inhibition – its role in extinction.</td>
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<td>7</td>
<td>April 14</td>
<td>L 13</td>
<td>Livesey</td>
<td>Latent inhibition.</td>
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<td></td>
<td>April 16</td>
<td>L 14</td>
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<td>Perceptual learning.</td>
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<td>----- mid-semester break -----</td>
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<td>8</td>
<td>April 28</td>
<td>L 15</td>
<td>Livesey</td>
<td>Discrimination and generalization.</td>
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<td></td>
<td>April 30</td>
<td>L 16</td>
<td></td>
<td>Learning and attention.</td>
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<tr>
<td>9</td>
<td>May 5</td>
<td>L 17</td>
<td>Livesey</td>
<td>Contingency learning and causal reasoning.</td>
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<tr>
<td></td>
<td>May 7</td>
<td>L 18</td>
<td></td>
<td>Conditioning and cognition.</td>
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<td>10</td>
<td>May 12</td>
<td>L 19</td>
<td>Boakes</td>
<td>Food aversion learning.</td>
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<td></td>
<td>May 14</td>
<td>L 20</td>
<td></td>
<td>Evaluative conditioning in rats and humans.</td>
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<td>11</td>
<td>May 19</td>
<td>L 21</td>
<td>Colagiuri</td>
<td>The Placebo effect I.</td>
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<td></td>
<td>May 21</td>
<td>L 22</td>
<td></td>
<td>The Placebo effect II.</td>
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<tr>
<td>12</td>
<td>May 26</td>
<td>L 23</td>
<td>Colagiuri</td>
<td>Learning and drug use.</td>
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<td></td>
<td>May 28</td>
<td>L 24</td>
<td></td>
<td>Other applications of learning.</td>
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<td></td>
<td>June 4</td>
<td>L 26</td>
<td></td>
<td>Social learning.</td>
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Equipment

Some tutorials will require students to bring a calculator. Students may also find it useful to have a USB memory stick for saving assignment and tutorial data.

Reading

The main text for the Learning component of Psychology 2 is suitable for many of the lecture topics:


Alternative textbooks (with copies in Fisher Undergraduate Library) that may sometimes be useful include:


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](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 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 2 Hour Loan (located on Level 3 of Fisher Library) is a collection of required and recommended items on Psychology reading lists that are only available in print format. A list of Reading material available electronically for your unit can be searched by unit of study or lecturer via the catalogue:

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

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/