# PSYC3011 – Learning and Behaviour

**Unit of Study Code:** PSYC3011

**Coordinator:**
Dr. Evan Livesey  
Office: Room 480 Griffith Taylor Building  
Phone: 9351 2845  
E-mail: evan.livesey@sydney.edu.au

**Other Teaching Staff:**
- Prof. Bob Boakes  
  Office: Room 484 Griffith Taylor Building  
  Phone: 9351 3347  
  E-mail: bob.boakes@sydney.edu.au
- Prof. Justin Harris  
  Office: Room 478 Griffith Taylor Building  
  Phone: 9351 2864  
  E-mail: justin.harris@sydney.edu.au
- Dr. Ben Colagiuri  
  Office: Room 486 Griffith Taylor Building  
  Phone: 9351 4589  
  E-mail: ben.colagiuri@sydney.edu.au

**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 21 students per group

**Credit Point Value:** 6 Credit Points

**Time Commitment:** 4 hours face to face per week; 8 hours private study per week

**Lecture attendance:** Required. 80% recommended to pass unit. Audio recordings made of most lecture content and most slides posted online. Attend your timetabled lecture.

**Tutorial attendance:** Required. 80% recommended to pass unit. Attendance recorded.

**Prerequisites:** PSYC2011 (or PSYC2911) and PSYC2012
<table>
<thead>
<tr>
<th>Assessment Name</th>
<th>Assessment Category</th>
<th>Assessment Type</th>
<th>% Assessment Weighting</th>
<th>Available/ Due Date</th>
<th>Closing Date</th>
<th>Feedback / Return of Marks Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial Quiz #1 (Multiple choice)</td>
<td>In-class assessment</td>
<td>Tutorial quiz</td>
<td>5%</td>
<td>Week 4 (27-31&lt;sup&gt;st&lt;/sup&gt; March) in tutorials – you must attend your allocated tutorial</td>
<td>Friday Week 4 (31&lt;sup&gt;st&lt;/sup&gt; March)</td>
<td>Marks will be available in Week 4</td>
</tr>
<tr>
<td>Tutorial Quiz #2 (Multiple choice)</td>
<td>In-class assessment</td>
<td>Tutorial quiz</td>
<td>5%</td>
<td>Week 6 (10-13&lt;sup&gt;th&lt;/sup&gt; April) in tutorials – you must attend your allocated tutorial</td>
<td>Thursday Week 6 (13&lt;sup&gt;th&lt;/sup&gt; April)</td>
<td>Marks will be available in Week 6</td>
</tr>
<tr>
<td>Tutorial Quiz #3 (Short-answer)</td>
<td>In-class assessment</td>
<td>Tutorial quiz</td>
<td>5%</td>
<td>Week 9 (8-12&lt;sup&gt;th&lt;/sup&gt; May) in tutorials – you must attend your allocated tutorial</td>
<td>Friday Week 9 (12&lt;sup&gt;th&lt;/sup&gt; May)</td>
<td>Marks will be returned in Week 11 tutorials</td>
</tr>
<tr>
<td>Tutorial Quiz #4 (Multiple choice)</td>
<td>In-class assessment</td>
<td>Tutorial quiz</td>
<td>5%</td>
<td>Week 12 (29&lt;sup&gt;th&lt;/sup&gt; May - 2&lt;sup&gt;nd&lt;/sup&gt; June) in tutorials – you must attend your allocated tutorial</td>
<td>Friday Week 12 (2&lt;sup&gt;nd&lt;/sup&gt; June)</td>
<td>Marks will be available in Week 12</td>
</tr>
<tr>
<td>Assignment Compulsory</td>
<td>Submitted work</td>
<td>Report</td>
<td>30%</td>
<td>Thursday 18&lt;sup&gt;th&lt;/sup&gt; May (Online submission)</td>
<td>Thursday 15&lt;sup&gt;th&lt;/sup&gt; June*</td>
<td>On-time submissions will be returned after Thursday 15&lt;sup&gt;th&lt;/sup&gt; June</td>
</tr>
<tr>
<td>Exam Compulsory</td>
<td>Exam</td>
<td>Final Exam</td>
<td>50%</td>
<td>WKs 15-16 - the Formal Exam period</td>
<td>University Final Results Release Date</td>
<td></td>
</tr>
</tbody>
</table>

**Total** 100%

*NOTE: Completion of compulsory assessments is necessary to pass this unit. Students who fail to complete any of these components will receive an Absent Fail, regardless of their marks in other assessments. ALL assessments in PSYC3011 are individual assessments.*
Unit of study general description:

PSYC3011 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.
Syllabus

History of learning and comparative psychology:
- Darwin and mental evolution
- Comparative psychology
- Behaviourism
- Early learning theory

The nuts and bolts of conditioning:
- The content of conditioning
- Conditions necessary for conditioning
- Inhibitory learning

Perception, attention and discrimination
- Perceptual learning
- Selective attention and learning
- Discrimination and generalization

Associtative learning phenomena
- Blocking and overshadowing
- Relative cue validity
- Conditioned Inhibition
- Latent Inhibition

Human associative learning
- Learning and causal reasoning
- Cognition and conditioning
- The placebo effect
- Learning and drug use

Theories of associative learning
- Formal models of learning
- The Rescorla-Wagner model

Learning of flavor preferences and aversions

Social Learning

Tutorial Program

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 except for Quiz #3 (Week 9), which will be short-answer format. The quizzes 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 Program for PSYC3011 Learning and Behaviour, Sem 1 2017

Students are expected to attend two 1-hr lectures each week (weeks 1 to 13). Lectures are at 10am on Mondays in Institute Lecture Theatre 1 and 10am on Wednesdays in Carslaw Lecture Theatre 159.

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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mar 6</td>
<td>L 1</td>
<td>Livesey</td>
<td>Introduction to learning and behaviour.</td>
</tr>
<tr>
<td></td>
<td>Mar 8</td>
<td>L 2</td>
<td>Boakes</td>
<td>Darwin and mental evolution.</td>
</tr>
<tr>
<td>2</td>
<td>Mar 13</td>
<td>L 3</td>
<td>Boakes</td>
<td>Comparative psychology and early Behaviourism.</td>
</tr>
<tr>
<td></td>
<td>Mar 15</td>
<td>L 4</td>
<td></td>
<td>Early learning theory: Pavlov, Hull and Tolman.</td>
</tr>
<tr>
<td>3</td>
<td>Mar 20</td>
<td>L 5</td>
<td>Boakes</td>
<td>Skinner’s operant psychology vs associative learning theory.</td>
</tr>
<tr>
<td></td>
<td>Mar 22</td>
<td>L 6</td>
<td>Harris</td>
<td>The content of conditioning.</td>
</tr>
<tr>
<td>4</td>
<td>Mar 27</td>
<td>L 7</td>
<td>Harris</td>
<td>The conditions necessary for conditioning: contiguity.</td>
</tr>
<tr>
<td></td>
<td>Mar 29</td>
<td>L 8</td>
<td></td>
<td>The conditions necessary for conditioning: contingency.</td>
</tr>
<tr>
<td>5</td>
<td>April 3</td>
<td>L 9</td>
<td>Harris</td>
<td>Theories of conditioning: Variations in associability of the CS or US.</td>
</tr>
<tr>
<td></td>
<td>April 5</td>
<td>L 10</td>
<td></td>
<td>The Rescorla-Wagner model.</td>
</tr>
<tr>
<td>6</td>
<td>April 10</td>
<td>L 11</td>
<td>Harris</td>
<td>The effects of non-reinforcement: extinction.</td>
</tr>
<tr>
<td></td>
<td>April 12</td>
<td>L 12</td>
<td></td>
<td>Conditioned inhibition – its role in extinction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>----- mid-semester break -----</td>
</tr>
<tr>
<td>7</td>
<td>April 24</td>
<td>L 13</td>
<td>Harris</td>
<td>Latent inhibition.</td>
</tr>
<tr>
<td></td>
<td>April 26</td>
<td>L 14</td>
<td></td>
<td>Social Learning.</td>
</tr>
<tr>
<td>8</td>
<td>May 1</td>
<td>L 15</td>
<td>Harris</td>
<td>Social Learning.</td>
</tr>
<tr>
<td></td>
<td>May 3</td>
<td>L 16</td>
<td>Livesey</td>
<td>Perceptual learning and discrimination</td>
</tr>
<tr>
<td>9</td>
<td>May 8</td>
<td>L 17</td>
<td>Livesey</td>
<td>Learning and attention.</td>
</tr>
<tr>
<td></td>
<td>May 10</td>
<td>L 18</td>
<td></td>
<td>Contingency learning and causal reasoning.</td>
</tr>
<tr>
<td>10</td>
<td>May 15</td>
<td>L 19</td>
<td>Livesey</td>
<td>Conditioning and cognition I.</td>
</tr>
<tr>
<td></td>
<td>May 17</td>
<td>L 20</td>
<td></td>
<td>Conditioning and cognition II.</td>
</tr>
<tr>
<td>11</td>
<td>May 22</td>
<td>L 21</td>
<td>Boakes</td>
<td>Food aversion learning.</td>
</tr>
<tr>
<td></td>
<td>May 24</td>
<td>L 22</td>
<td></td>
<td>Flavour preference learning.</td>
</tr>
<tr>
<td>12</td>
<td>May 29</td>
<td>L 23</td>
<td>Colagiuri</td>
<td>The Placebo effect I.</td>
</tr>
<tr>
<td></td>
<td>May 31</td>
<td>L 24</td>
<td></td>
<td>The Placebo effect II.</td>
</tr>
<tr>
<td>13</td>
<td>June 5</td>
<td>L 25</td>
<td>Colagiuri</td>
<td>Learning and drug use.</td>
</tr>
<tr>
<td></td>
<td>June 7</td>
<td>L 26</td>
<td></td>
<td>Other applications of learning.</td>
</tr>
</tbody>
</table>
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

Lecturers will refer to required readings as they arise throughout semester. Many readings will be accessible electronically through the University Library website. 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:


Attendance

You are expected to attend, in person, 80-100% of all timetabled activities. It is our view that students who attend less than 80% will struggle to pass the Unit.

Lecture attendance. Lecture attendance at lectures is not recorded because attendance is expected. PSYC3011 is not an online course. We provide lecture recordings and selected lecture slides to aid your study, not as a replacement for attending lectures. Note that the audio quality of lecture recordings is sometimes poor and the recording itself occasionally fails. The lecturer may also decide, at their discretion, to prevent a whole lecture or a section of a lecture from being recorded.

Tutorial attendance. Tutorial attendance in PSYC3011 is recorded. Please attend the tutorial to which you are timetabled. If you miss a tutorial because of an illness or misadventure, do not apply for Special Consideration for missed attendance. If you miss an in-class tutorial quiz because of an illness or misadventure, apply for Special Consideration for the assessment that you have missed but not for tutorial attendance. We cannot offer ‘make-up’ tutorials regardless of the reasons for your absence. If you miss a lot of tutorials or lectures then, regardless of the reasons, consider withdrawing from PSYC3011 because you will struggle to pass the course.

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:

If you have (or develop) a continuing issue, register with Disability Services here: http://www.sydney.edu.au/disability
In this unit of study Simple Extensions are not granted. Apply formally for special consideration using the link above if you require any extension.

Note that students who apply for and are granted either special arrangements or special consideration for examinations in units offered by the Faculty of Science will be expected to sit any replacement assessments in the two weeks immediately following the end of the formal examination period. Later dates for replacement assessments may be considered where the application is supported by appropriate documentation and provided that adequate resources are available to accommodate any later date.

Assessment standards and criteria

The Research Report Assignment is a compulsory assessment and must be:

- Within 10% of the word limit (2000 words, including the abstract, but not including title, tables, figure headings and reference list)
- On the correct topic, and in the correct format
- Written wholly by you, for this assignment

Otherwise it will not be considered a serious attempt. Because this is a compulsory assessment requirement, if you do not submit a serious attempt at the Report you will receive an AF (Absent fail) for PSYC3011. A full marking rubric and guidelines for writing the assignment will be posted on the eLearning site.

In PSYC3011, there are no individual assessments for which a low mark automatically results in a fail for the Unit of Study. If your total mark for the course is 50 or more, you will pass the unit.

Late penalties

You will receive a penalty of 2% of the maximum value of the Research Report (i.e. 2 marks / 100) for each calendar day (or part thereof) it is late, up to the closing date of the assignment, after which no more submissions will be accepted.

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.
Data collection

Note that your participation in this unit of study permits us to use your learning analytics to be used to improve your experience of learning.

eLearning/Blackboard access

You are required to be given access to the eLearning site for this Unit of Study from the beginning of the week before semester begins. This document and, in particular, details about assessment due dates, weightings and closing dates, must be available on that eLearning site from that time, and changes will not be made to these details throughout semester except in exceptional circumstances.