PSYC3011 – Learning and Behaviour

Unit of Study Code: PSYC3011

Coordinator: Dr Evan Livesey
Office: Room 502 Griffith Taylor Building
Phone: 9351 2845
E-mail: evan.livesey@sydney.edu.au

Other Teaching Staff: Professor Bob Boakes
Office: Room 466 Griffith Taylor Building
Phone: 9351 3347
E-mail: bob.boakes@sydney.edu.au

A/Prof. Justin Harris
Office: Room 478 Griffith Taylor Building
Phone: 9351 2864
E-mail: justin.harris@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 20 students per group

Credit Point Value: 6 Credit Points

Prerequisites:
12 credit points of Intermediate Psychology:
PSYC2011 (or PSYC2111)
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 Monday week 11): 30%
One multiple choice mid-semester quiz (in week 7): 15%
One tutorial content quiz (in week 12): 5%
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 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.

Specific 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, mid-semester quiz, and in the final examination.

Knowledge and Understanding of the Principles and Theory of Learning Processes

• To know the fundamental factors that influence simple associative learning and learn about some basic phenomena that have been discovered through scientific exploration of the behaviour of animals (including humans).
• To understand some of the major theoretical models that have been proposed to describe the mechanisms underlying simple associative learning, and to appreciate the role of theory in the generation of knowledge in learning
• To recognize how principles of associative learning apply to everyday lives of humans and other animals, and see how research into learning is relevant to clinical conditions.

Research Methods

Students are expected to discover basic methods of research into associative learning by participating in experiments and learning about the objective, experimental design, analysis of results, and interpretation of results from these experiments. Through this students should develop a critical understanding of the virtues and limitations of experimental methods, and develop an astute understand of the power of experimental design. They should also learn to work with data and draw conclusions from experimental findings, and write a research report based a real experiment.

Communication Skills

The students will develop skills in reading primary sources in this area, and will write a standard research report following American Psychological Association (APA) structure and formatting conventions.
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 severely penalise all submitted work that is plagiarised;
iii) The School of Psychology is using software to detect all forms of plagiarism (this will apply to your Group Project)

Tutorial Programme

Starting in Week 2, ten 2-hour tutorial meetings will be held at which students will participate in a variety of research projects investigating different issues related to associative learning in both humans and rats. The 2,000-word report is based on one of these projects. Towards the end of this period, the location of the tutorials will change in order to conduct a study with rats in the teaching laboratory in the Badham building. A mid-semester quiz will be conducted during one of these tutorials. Further information about the timing of the quiz and room changes will be given in lectures at the start of semester and will be available online.

NOTE: Attendance at the tutorials is compulsory. In addition, there will be a quiz in week 12, which will assess content covered solely in the tutorial program. The quiz is worth 5% of the total mark.

NOTE: The research report must be submitted on line, as well as in hard copy. It will be analysed by plagiarism detection software.
**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, in Bosch Lecture Theatre 3.

Below is a draft 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>Lecture #</th>
<th>Lecturer</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L 1:</td>
<td>Livesey</td>
<td>Basic properties of classical conditioning.</td>
</tr>
<tr>
<td></td>
<td>L 2:</td>
<td></td>
<td>The content of conditioning.</td>
</tr>
<tr>
<td>2</td>
<td>L 3</td>
<td>Harris</td>
<td>The conditions necessary for conditioning: contiguity.</td>
</tr>
<tr>
<td></td>
<td>L 4:</td>
<td></td>
<td>The conditions necessary for conditioning: contingency.</td>
</tr>
<tr>
<td>3</td>
<td>L 5:</td>
<td>Harris</td>
<td>Theories of conditioning: Variations in associability of the CS or US.</td>
</tr>
<tr>
<td></td>
<td>L 6:</td>
<td></td>
<td>The Rescorla-Wagner model.</td>
</tr>
<tr>
<td>4</td>
<td>L 7:</td>
<td>Harris</td>
<td>The effects of non-reinforcement: extinction.</td>
</tr>
<tr>
<td></td>
<td>L 8:</td>
<td></td>
<td>Conditioned inhibition – its role in extinction.</td>
</tr>
<tr>
<td></td>
<td>L 10:</td>
<td></td>
<td>Perceptual Learning.</td>
</tr>
<tr>
<td>6</td>
<td>L 11:</td>
<td>Livesey</td>
<td>Discrimination and generalization.</td>
</tr>
<tr>
<td></td>
<td>L 12:</td>
<td>Colagiuri</td>
<td>Associative learning and drug use</td>
</tr>
<tr>
<td>7</td>
<td>L 13:</td>
<td>Colagiuri</td>
<td>The placebo effect</td>
</tr>
<tr>
<td></td>
<td>L 14:</td>
<td>Boakes</td>
<td>Darwin and mental evolution.</td>
</tr>
<tr>
<td>8</td>
<td>L 15:</td>
<td>Boakes</td>
<td>Comparative psychology and early Behaviourism.</td>
</tr>
<tr>
<td></td>
<td>L 16:</td>
<td></td>
<td>Early learning theory: Pavlov, Hull and Tolman.</td>
</tr>
<tr>
<td>9</td>
<td>L 17:</td>
<td>Boakes</td>
<td>Skinner’s operant psychology vs associative learning theory.</td>
</tr>
<tr>
<td></td>
<td>L 18:</td>
<td></td>
<td>Food aversion learning.</td>
</tr>
<tr>
<td>10</td>
<td>L 19:</td>
<td>Boakes</td>
<td>Evaluative conditioning in rats and humans.</td>
</tr>
<tr>
<td></td>
<td>L 20:</td>
<td>Livesey</td>
<td>Connectionism and neural networks</td>
</tr>
<tr>
<td>11</td>
<td>L 21:</td>
<td>Harris</td>
<td>Social Learning</td>
</tr>
<tr>
<td></td>
<td>L 22:</td>
<td></td>
<td>Social Learning</td>
</tr>
<tr>
<td>12</td>
<td>L 23:</td>
<td>Thorwart</td>
<td>Pavlovian conditioning in humans</td>
</tr>
<tr>
<td></td>
<td>L 24:</td>
<td>Livesey</td>
<td>Learning &amp; awareness.</td>
</tr>
<tr>
<td>13</td>
<td>L 25:</td>
<td>Livesey</td>
<td>Distinctions between learning systems.</td>
</tr>
<tr>
<td></td>
<td>L 26:</td>
<td></td>
<td>Contingency learning and causal reasoning.</td>
</tr>
</tbody>
</table>

----- mid-semester break -----
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:


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/.

You can contact your Psychology Faculty Liaison Librarian at library.psychology@sydney.edu.au. The Psychology Librarian is located at Badham Library, level 1, Badham Building, Science Rd, Camperdown Campus. You can phone 91141292 or send an email psychology.library@sydney.edu.au.

Psychology books in high demand

Reserve (located on Level 2 of Fisher Library) is a 2 hour loan collection. Most of your required and recommended items will be here. Details of these can are located in the catalogue, you search for these at http://opac.library.usyd.edu.au/search/r.

Psychology subject guide

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

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/