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

Credit Point Value: 6 Credit Points

Prerequisites: Intermediate Psychology units including
PSYC (2011 or 2111) and at least one other Intermediate Psychology
unit from PSYC (2012 or 2112), PSYC (2013 or 2113), PSYC (2014
or 2114).

Assessment: Classwork:
40% of total mark: 2,000-word Practical Report;
Due Date: Week 12, Friday 2 June before 4pm
5% of total mark: tutorial contribution.

Examination: 55% of total mark: essay, multiple choice and short answer questions.

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, food choice, and learned helplessness. 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.
Teaching outcomes:

- Awareness of the recent issues and research in associative learning.
- Knowledge of theoretical development in learning, and appreciation of the role of theory in the generation of knowledge in learning.
- Experience with conducting research in learning, and the ability to evaluate research methodology and identify appropriate control conditions.
- Awareness of the role of learning in relevant behavioural health issues (especially drug taking).
- Capacity to derive applications of principles from learning in order to explain various aspects of human behaviour.
- Ability to write clearly on theoretical and empirical analyses of research in learning.
- Development of skills in reading primary sources in this area.

Tutorial programme

Starting in Week 2, regular 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. It is estimated that these tutorials will run for 10 weeks (ending in week 11), although this timeline may be revised (the tutorials may run beyond week 11). Part way through the semester, the location of the tutorials may change in order to conduct a study with rats in the teaching laboratory in the Bradin building.

NOTE: Attendance at the tutorials is compulsory. In addition, tutors will allocate a mark (5% of the total for the course) based on contribution to the tutorial program. This will be based on the tutor's knowledge of contributions.

Lecture programme

Students are expected to attend two 1-hr lectures each week (weeks 1 to 13). Lectures are at 10am on Mondays (Bosch Lecture Theatre 3) and 10am on Wednesdays (Chemistry Lecture Theatre 1).

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

Lecture 1:  Basic properties of classical conditioning  (Harris)

Lecture 2:  Learned flavour preferences and aversions.  (Harris)

Lecture 3:  The content of conditioning.  (Harris)

Lecture 4:  The conditions necessary for conditioning: contiguity.  (Harris)

Lecture 5:  The conditions necessary for conditioning: contingency.  (Harris)

Lecture 6:  Theoretical models of conditioning: Variations in associability of the CS or US.  (Harris)

Lecture 7:  The effects of non-reinforcement: Extinction  (Harris)

Lecture 8:  Conditioned Inhibition – its role in extinction and latent inhibition?  (Harris)
Lecture 9: Further models of conditioning: Wagner's SOP model (Harris)
Lecture 10: Perceptual learning (Harris)
Lecture 11: Social learning (Harris)
Lecture 12: Conditioning and awareness. (Harris)
Lecture 13: Habituation and drug tolerance (Johnston)
Lecture 14: Interactions between instrumental and classical conditioning (in the context of drug use) (Johnston)
Lecture 15: Placebo effects (Johnston)
Lecture 16: The neural mechanisms underlying a simple form of conditioning (Johnston)
Lecture 17: Fear conditioning and extinction (and its neural basis) (Johnston)
Lecture 18: Body-to-brain interactions (Johnston)
Lecture 19: Learned helplessness (Johnston)
Lecture 20: Contingency and causality judgments in humans (Johnston)
Lecture 21: Human Evaluative Conditioning (Boakes)
Lecture 22: Implicit learning (Boakes)
Lectures 23-26: History of research and theory on associative learning (Boakes)

Reading

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


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


See also later editions by Schwartz & Robbins (1995), and Schwartz, Wasserman & Robbins (2001)

The following book presents the basic ideas of associative learning in a non-textbook way that some students may find highly illuminating:


Similarly, detailed treatment of learned helplessness (Lectures 1 – 4) is provided by


Copies of papers listed above for lectures should be available in Special Reserve, Fisher Library.

University of Sydney - Administrative Guidelines & Syllabus, Senior Psychology, 2006 page 18