University of New South Wales
PSYC3051 Physiological Psychology
Session 2, 2016

Staff and contact details

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covers in more detail you research question, a proposed experiment, and some potential findings and possible interpretations and implications. You will have 10 minutes for this and can earn up to 7% of your final mark. **Completion of all oral presentations is a condition of completing the entire assessment.** The second part is a poster presenting your proposed experiment, based on a template to be supplied to you in week 3. An electronic copy of your poster must be submitted at the end of week 10 following the procedures below (30% of your final mark). This poster will be based on the presentations given in class, allowing you to incorporate feedback from your presentations (and those of others) into your final completed work.

3. Final examination (worth 60% of your mark for the course)
The final examination will be held in the usual end of session examination period, and will assess the lecture material, excluding that assessed in the midterm. This will take the format of an 75-question multiple choice examination over 2 hours, with 15 questions from each of the 4 sections of the course delivered by different lecturers (lecture content and associated readings), and 15 questions derived from practical classes in weeks 5, 6, 11, 12 and associated readings.

Please see the Psychology Student Manual for general advice and regulations concerning assessment, class attendance, and other relevant matters. Please also note that this course may require work outside of scheduled class-time.

Course Materials

A website is available via Moodle (http://telt.unsw.edu.au). This site will contain usual course materials (overheads, readings etc.) as well as a link to digital streaming lecture recordings, where available.

Course Aims and Objectives

Lectures
This course deals with elementary learning processes and their neurobiological substrates. These include: an overview of the role of appetitive and aversive motivation in learning, behavior and psychopathology. learning about relations between stimuli (e.g., Pavlovian conditioning); learning about relations between actions and outcomes (e.g., instrumental conditioning); how goals are represented and how they drive behavior; and the development of habitual and compulsive behaviours. Emphasis will be placed on contemporary theories and approaches, including discussion of the role of molecular signaling cascades and neuronal coding in learning and memory, the role of neural systems in supporting behaviour, and examples of where changes in such systems are thought to underpin human mental disorders.
The course is divided into four sections:

McNally: Neural circuits of appetitive and aversive motivation
Killcross: Neural basis of action and choice
Clemens: Neurobiology of addiction and animal models of mental disorders
Westbrook: Behavioural studies of learning

Lab course
The primary goal of laboratory component of the course is to provide “hands on” experience in various aspects of research in physiological psychology. As such, a significant component of the course will involve handling and experimentation on animal subjects (rats). Given the “hands on” approach in this tutorial course, it is imperative that you contact your lecturer as soon as possible if obligations of any kind prevent you from taking part in these activities.

Course Guide

McNally (6 lectures, weeks 1-3):
Neural circuits of appetitive and aversive motivation

Clemens (6 lectures, weeks 4-6):
Neurobiology of addiction and animal models of mental disorders

Westbrook (6 lectures, weeks 7-9):
Behavioural studies of learning

Killcross (5* lectures, weeks 10-12):
Neural basis of action and choice

*No lecture Monday 3 Oct, Week 10 (Labour Day)

Laboratory classes (Weeks 3 12)
Please note: Labs commence in Week 3.and run for weeks 3-9, 11- 12 in Mathews 203.
Week 3: Introduction to research proposal and poster presentation