Winter 2018

ANSC*6720, The Scientific Assessment of Affective States

Ian J.H. Duncan

I. Overview and learning objectives

'The Scientific Assessment of Affective States' is a semester-long course for graduate students interested in using behavioural, physiological and other measures to draw objective, defensible conclusions about emotions, moods and affective disorders in non-human animals. It is primarily aimed at animal welfare students, but is relevant to behavioural neuroscience and veterinary students as well (course content will be 'tweaked' *ad hoc* to meet their needs if they attend).

A mix of formal lectures, class discussions, take-home readings, short answer assignments, essay-writing and group work will enable students to:

- *Explain the nature and hypothesized biological functions of affective states;*
- *Appreciate the roles that animals' affective states play in different conceptions of animal welfare, and formally articulate and defend personal views of welfare;*
- *Understand the scientific challenges of assessing subjective experiences;*
- *Understand how various indicators of animal affective states have been validated, and their pros and cons for tackling different types of welfare problem/answering different types of research question about affective states, in particular:*

    measures of conditioned and unconditioned preference/avoidance; abnormal repetitive behaviour such as stereotypies; corticosteroid responses; measures of sympathetic activation; judgment biases (e.g. acoustic startle; cognitive bias); infant and adult mortality rates.

- *Have a useful, rigorous set of guidelines for assessing affective states.*

II. Graded assignments

There will be two small assignments, one a presentation and one a written paper, worth 15% each carried out before the Semester break, and two larger assignments worth 35% each (one of which I can grade in draft form first if you wish – see below).

One of the major assignments will be a ***Lecture Presentation:*** this will be a group exercise (done in groups of 2-3 depending on topic size; topics will be listed shortly). The product should be an academic lecture, written at a level suitable for the researchers, professors and graduate students of the Animal Behaviour and Welfare Group. The lecture can be given by a single member of the group or any combination of group members. All group members will receive the same grade.

The other major assignment is a ***Major Paper***. This is an individual exercise, also worth 35%. I want a scholarly, well-referenced, logical review, no more than 7 pages long (1.5 line spacing, 12 pt font) excluding references and figures. Draft papers can be handed in for feedback before the deadline (on/by Mar 28th) graded out of 10%; the final version will then be graded out of 25%. Alternatively, the final paper can be handed in for grading out of 35% on or by April 11th. The paper and group lecture together are thus worth 70%. The ***Major Paper*** should be on part of the topic of the ***Lecture Presentation.***

III. Schedule, Winter 2018

1.	Jan. 10th	Affective states: what are they and why are they interesting?
2.	Jan. 17th	Validating indicators of affective states: what properties must they have?
3.	Jan. 24th	Indicators continued
4.	Jan. 21st	Preference/avoidance as indicators of affective states
5.	Feb. 7th	Acute HPA responses as indicators of affective states Small papers due (15%)
6.	Feb. 14th	Students make small presentations (15%)
		SPRING BREAK ***Monday 19th to Friday 23rd February***
7.	Feb. 28th	Acute SAM responses as indicators of affective states
8.	Mar. 7th	Judgment biases as indicators of affective states
9.	Mar. 21st	Abnormal repetitive behaviour as an indicator of affective states
10.	Mar. 21st	Mortality rates as indicators of affective states
11.	Mar. 28th	Final presentations, first groups *(35 marks)*

12.	Apr. 4th	Final presentations, second groups *(35 marks)*
	Apr. 11th	Major papers due (35%)