

PSYC 472: Advanced Topics in the Neuroscience of Motivation

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Course outline:

Prereqs: **PSYC 361.**

This course will build on the foundational information covered in the 3rd year course “Neuroscience of Motivation (PSYC 361)”. It is aimed at 3rd-4th year students who are specialising in Behavioural Neuroscience for their major.

Course learning outcomes:

1. Discuss decision-making paradigms involving value judgments and uncertain outcomes, beyond the Iowa Gambling Task.
2. How does the neurobiology of goal-directed behaviour differ from habitual/automatic processes, and how has this framed the theoretical consideration of psychiatric disorders?
3. Evaluate the strengths and weakness of the concept of food addiction.

My goal for this course: Make it INTERESTING, VALUABLE and EDUCATIONAL.

There is no textbook for this course- all the information covered will be contained in original articles or reviews. Required readings will be posted on the canvas website.

The first half of the course will be purely lecture-based, although class discussions will be encouraged as time permits. In the second half of the course, you will choose and present a paper based on the information covered in the first half of the course (details below). You will also write a press release based on this paper, create a poster, and pitch the importance of the science in 60s. Rubrics will be provided for all assessments on Canvas.

Course grade: The course grade will be made up as follows:

Midterm (essay-based, closed book, in class time): 30%

Presentation: 20%

Poster: 20%

Press release: 15%

60s pitch: 10%

Peer review and participation: - up to 5%

Presentation guidelines:

Choose a paper from one of the following journals:

Addiction Biology; Behavioural Neuroscience, Behavioural Brain Research, Biological Psychiatry; Brain, Behavior and Immunity; European Journal of Neuroscience; eNeuro; Journal of Neuroscience; Journal of Psychiatry and Neuroscience; Molecular Psychiatry; Neuron, Neuropharmacology; Neuropsychopharmacology; Nature Neuroscience; Psychopharmacology; Psychoneuroendocrinology; Translational Psychiatry

If there's a paper you'd like to present from a journal not on this list, you must ask me first

When choosing your paper, take time to THINK CAREFULLY about the importance of the science, and whether the material lends itself to all forms of the assessment (presentation, poster, press release, 60s pitch). Are you excited about the findings? Are you passionate enough about the paper to spend so much time working with it? Are the results too complex or too simple or just right? Read through all the rubrics before making your final decision, and make sure the paper you've chosen allows you to shine.