COURSE DETAIL

4.00

BIOLOGICAL PSYCHOLOGY Country Australia **Host Institution** University of Melbourne Program(s) University of Melbourne **UCEAP Course Level Upper Division UCEAP Subject Area(s)** Psychology **UCEAP Course Number** 122 **UCEAP Course Suffix UCEAP Official Title BIOLOGICAL PSYCHOLOGY UCEAP Transcript Title BIOLOGICAL PSYCH UCEAP Quarter Units** 6.00 **UCEAP Semester Units**

Course Description

This course examines the relationship between brain mechanisms and behavior. The course develops an appreciation of the neurobiological basis of psychological function and dysfunction via two approaches. The first emphasizes a top-down method that links psychological functions to their biological substrates. Neuroscientific research techniques and what they can reveal about psychological function are emphasized. These techniques are presented within an historical context, beginning with electroencephalography (EEG) and finishing with functional magnetic resonance imaging (fMRI). The second approach emphasizes a bottom-up approach including the topics of brain development, neurons and neural circuits, neurotransmission and neurotransmitter substances, and the structurofunctional properties of selected brain regions. Neurobiological principles are illustrated using conditions with abnormal neuronal function. A quantitative methods component is integrated into the lecture, tutorial and assessment structure of this course. It provides an understanding of, and practical experience with, the appropriate experimental design and statistical analysis techniques used to evaluate hypotheses in Biological Psychology.

Language(s) of Instruction

English

Host Institution Course Number

PSYC20006

Host Institution Course Title

BIOLOGICAL PSYCHOLOGY

Host Institution Campus

Parkville

Host Institution Faculty

Host Institution Degree

Host Institution Department

Psychology