

534-302 Neuropharmacology

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: 18 lectures and 24 hours of practical work Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	534-301; exemption may be given at the discretion of the Head of Department for BBiomedSc students wishing to take 534-302 as part of the neuroscience stream.
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. This subject requires all students to actively and safely participate in laboratory activities. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinator and the Disability Liaison Unit.
Coordinator:	Dr Peter Crack
Subject Overview:	The teaching program will address the mechanisms of neurochemical transmission and co-transmission and the techniques used to identify transmitter substances and monitor transmitter release. Central nervous system adrenergic and cholinergic pharmacology will be discussed, in addition to peptide and amino acid neurotransmitter systems. The interaction of neuropharmacological agents such as antidepressants at sites of chemical neurotransmission will be discussed. In the practical component of the course, students will develop skills to set up and carry out experiments using computer-based recording equipment, and learn to record and analyse the results of pharmacological experiments demonstrating the use of drugs affecting neurotransmission. Through this process, it is envisaged that students will come to appreciate the importance of good laboratory practice, including the proper handling of laboratory animals, keeping of laboratory records, and experimental design.
Objectives:	By the end of this subject a student will have: <ul style="list-style-type: none"> # knowledge of the actions of important drugs used clinically and in research for central nervous system disorders; # used modern molecular approaches to understand neuronal function, and obtained an appreciation of their application to specific neurological problems; and # applied laboratory techniques and analytical approaches in different areas of neuropharmacology including the analysis and interpretation of data derived from experiments.
Assessment:	Ongoing assessment of practical work during the semester (25%); a 2-hour written examination in the examination period covering material presented in lectures and practicals (75%).
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2009/D09) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)

	You should visit learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject students should be able to: <ul style="list-style-type: none"> # apply scientific approaches to problem solving; # participate effectively in group work and make clear presentations; and # apply quantitative analysis to data and to construct a clear written report.
Notes:	Students enrolled in the BSc (pre-2008 BSc), BASc or a combined BSc course will receive science credit for the completion of this subject. This subject is likely to be quota-restricted this year. Experiments involving the use of animals are an essential part of this subject; exemption is not possible.
Related Course(s):	Bachelor of Biomedical Science Graduate Diploma in Biotechnology
Related Majors/Minors/ Specialisations:	Neuroscience Pharmacology