

Pharmacology

Year and Campus:	2010																		
Coordinator:	Dr Michael Lew Department of Pharmacology																		
Contact:	michaell@unimelb.edu.au (mailto:michaell@unimelb.edu.au)																		
Overview:	Pharmacology is the study of the interactions between drugs and living systems, and pharmacologists develop new drugs, determine how drugs act, and utilise drugs to discover the inner workings of cells. The discipline of pharmacology stands at the intersection of many areas of biomedical science and so a major in pharmacology will provide the springboard for a career in biomedical research. The discipline-specific skills of pharmacology are invaluable to the expanding biotechnology industry, giving graduates access to exciting careers. Graduates will gain an in depth understanding of drug actions and a broad appreciation of the scientific process of knowledge acquisition and problem solving.																		
Objectives:	By the end of this major a student should have: <ul style="list-style-type: none"> # knowledge of the actions of important drugs used clinically and in research; # an understanding of how the actions of new drugs are characterised and how drugs can be used to investigate questions of biological processes and signaling; # an understanding of the process of drug discovery and development; # used modern molecular approaches to solving pharmacological problems, and obtained an appreciation of their application to specific biological problems; # applied laboratory techniques and analytical approaches in different areas of pharmacology including the analysis and interpretation of data derived from experiments; # gained experience in the written and oral presentation of scientific data and developed an appreciation of the scientific literature. 																		
Structure & Available Subjects:	In 2010 a number of new third year level subjects have been introduced, replacing or adding to subjects previously available within the major. Some previously offered subjects have been cancelled. The University is committed to ensuring that students are not disadvantaged by these changes and students may complete a major as defined by the current structure or a structure detailed in a previous year's handbook applicable to any year the student was enrolled in the course. Students completing third year level subjects across multiple years (e.g. in 2009 and 2010) should refer to advice within each subject entry on non-allowed subject combinations. Students unsure about the structure of their intended major should seek advice from the Science Student Centre.																		
Subject Options:	<p>Pharmacology major</p> <p>Completion of 50 points of study at third year level.</p> <p>Core subject/s</p> <p>534-301 Cellular and Molecular Pharmacology (25 points) (Prior to 2010)</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PHRM30008 Drugs: From Discovery to Market</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>PHRM30009 Drugs in Biomedical Experiments</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus at least one of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>PHRM30003 Drug Treatment of Disease</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>PHRM30002 Drugs Affecting the Nervous System</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	PHRM30008 Drugs: From Discovery to Market	Semester 1	12.50	PHRM30009 Drugs in Biomedical Experiments	Semester 1, Semester 2	12.50	Subject	Study Period Commencement:	Credit Points:	PHRM30003 Drug Treatment of Disease	Semester 2	12.50	PHRM30002 Drugs Affecting the Nervous System	Semester 2	12.50
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	<p>Plus if only 12.5 points selected from 534-304 and 534-302</p> <p>One of:</p> <ul style="list-style-type: none"> # 534-305 Toxicology (Prior to 2010) # 534-306 Drug Discovery (Prior to 2010) # 600-311 Science Research Project (Available Summer, Semester 1, Semester 2 2010) # 516-307 Research Project (Prior to 2010) # Or a third year subject in one of the following disciplines: <ul style="list-style-type: none"> # Anatomy and Cell Biology; # Biochemistry and Molecular Biology; # Chemistry; # Microbiology and Immunology; # Neuroscience; # Pathology; # Physiology; # Zoology <p>Please note that credit exclusions may apply. Check individual subject descriptions for further information.</p>
Notes:	The topic of the Research Project must be related to pharmacology.
Related Course(s):	Bachelor of Arts and Bachelor of Science Bachelor of Arts and Sciences Bachelor of Commerce and Bachelor of Science Bachelor of Science Bachelor of Science and Bachelor of Information Systems