

Subject Description Form

Subject Code	ABCT2330
Subject Title	PHARMACOLOGY IN REHABILITATION
Credit Value	1
Level	2000, Year 2-Semester 1
Pre-requisite / Co-requisite/ Exclusion	Human Physiology (ABCT2326)
Objectives	The subject is designed to provide physiotherapy or occupational therapy students with an overview to pharmacology. It equips students with problem solving skills, analytical skills and conceptual framework to discuss issues from both pharmacological and toxicological perspectives associated with physiotherapy or occupational therapy. Studying this subject will facilitate students to further develop their careers in physiotherapy or occupational therapy. In addition, it will help develop students' critical thinking for their personal development.
Intended Learning Outcomes	<i>Upon completion of the subject, students will be able to:</i> <ol style="list-style-type: none"> a. explain and analyze pharmacological issues with an insight of the general principles, the mechanisms of action and the fate of chemicals inside the body. b. interpret the drug mechanisms on the treatment of selected diseases. c. evaluate the therapeutic and toxic effects of drugs with suitable methodology of pharmacology, and toxicology. d. apply pharmacological and toxicological knowledge to analyze practical examples and to solve problems in physical therapy and occupational therapy related areas. e. develop their analytical, critical thinking, oral and written communication skills.
Subject Synopsis/ Indicative Syllabus	<p>Basic principles of Pharmacology:</p> <ul style="list-style-type: none"> - Definition, history of pharmacology and its relationship with other medical disciplines. - Nature and sources of drugs, drug nomenclature. - Effects of drugs on the body---pharmacodynamics - Effects of the body on drugs---pharmacokinetics - Basic principles of toxicology and adverse drug reactions - Adverse drug effects in the geriatric population <p>Pharmacology of the autonomic and central nervous systems:</p> <ul style="list-style-type: none"> - Basic principles of neural transmission. - Drugs affecting the autonomic nervous system. - Drugs affecting the central nervous system. - Drugs for neurological and psychiatric disorders. <p>Drugs affecting major organ system:</p> <ul style="list-style-type: none"> - Basic principles and drugs for cardiovascular disorders - Basic principles and drugs for respiratory disorders.

	<ul style="list-style-type: none"> - Basic principles and drugs for musculoskeletal disorders - Basic principles and drugs for disorders in endocrine system. - Basic principles and examples of antimicrobial/antiviral drugs. - Basic principles and examples of chemotherapy. 																														
Teaching/Learning Methodology	Interactive lectures are used to provide general outlines of key concepts of the subject and to provide guidance on further readings and applications. Each interactive lecture has several sessions of short lectures to provide basic theoretical framework to students. After each short lecture, in-class activities (case studies, group discussion, etc) focusing on high order thinking are used to facilitate students' learning.																														
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="5">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>1. Examination</td> <td>100%</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> <tr> <td>Total</td> <td>100%</td> <td colspan="5"></td> </tr> </tbody> </table>					Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					a	b	c	d	e	1. Examination	100%	✓	✓	✓	✓	✓	Total	100%					
	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)																												
a			b	c	d	e																									
1. Examination	100%	✓	✓	✓	✓	✓																									
Total	100%																														
<p><i>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</i></p> <p>Examination is focused on analytical skills and problem solving skills to solve pharmacology problems in particular.</p>																															
Student Study Effort Expected	Class contact:				(14 Hrs.)																										
	▪ Lecture				13Hrs																										
	Other student study effort:																														
	▪ Self-study				26 Hrs																										
	Total student study effort:				39 Hrs																										
Reading List and References	<p>Essential</p> <ol style="list-style-type: none"> 1. Rang, H.P. Dale, M.M. Ritter, J.M. Pharmacology 6th Edition Churchill Livingstone, 2007. 2. Richard D Howland, Pamela C. Champe. Lippincott's Illustrated Reviews: Pharmacology. 4th Edition. Lippincott Williams & Wilkins, 2009. <p>Supplementary</p> <ol style="list-style-type: none"> 1. Katzung, B.G. Basic & Clinical Pharmacology 11th Edition McGraw-Hill Medical, 2009. 2. Stringer, J.L. Basic Concepts in Pharmacology 3rd Edition McGraw-Hill, 2006. <p>Recommended Academic Journals 1. Annual Review of Pharmacology and Toxicology 2. Trends In Pharmacological Science</p>																														