

## Liverpool John Moores University

Title: PHARMACOLOGY FOR NON-MEDICAL PRESCRIBING  
 Status: Definitive  
 Code: **6086PQHEAL** (112431)  
 Version Start Date: 01-08-2014

Owning School/Faculty: Nursing and Allied Health  
 Teaching School/Faculty: Nursing and Allied Health

Team	Leader
Donal Deehan	Y
Susan Baker	

**Academic Level:** FHEQ6      **Credit Value:** 15.00      **Total Delivered Hours:** 84.50

**Total Learning Hours:** 150      **Private Study:** 65

### Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	30.000
Online	40.000
Tutorial	12.000

**Grading Basis:** 80 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	The assessment for this module consists of an examination and coursework that assess both pharmacological issues and numeracy. Both elements need to be passed at an appropriate standard for a pass to be awarded for the module.	100.0	2.50

<b>Competency</b>	Health Numeracy Exam
-------------------	----------------------

## Aims

*To equip new prescribers with a knowledge of clinical pharmacology and therapeutics and to develop their numerical skills which are essential for safe prescribing practice.*

*To equip new prescribers with a critical understanding of the evidence base underpinning the safe and appropriate use of drugs in prescribing practice.*

*Learning outcomes are mapped against NMC prescribing standards and HPC standards of education and training set 4.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate a critical understanding of the aetiology, pathophysiology and clinical pharmacology which underpins national guidelines and hence clinical management plans for major disease states (learning outcome NMC 6).
- 2 Demonstrate a thorough knowledge of the mechanisms by which drugs enter, are distributed around and are eliminated from the body: the impact of physiological state upon these processes and their relevance to dosing regimes (NMC 6).
- 3 Recognise and demonstrate a critical appreciation of the significance of drug interactions and adverse drug reactions upon both pharmacodynamic and pharmacokinetic processes and apply this to practice (HPC 4.4 and NMC 6).
- 4 Demonstrate a thorough understanding of common drug dosing regimes, and be able to calculate appropriate strengths and concentrations of medicines in line with those regimes ( NMC 6 ).

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

EXAM	1	2	3	4
Health Numeracy Exam				4

## Outline Syllabus

*Clinical Pharmacology including the Effects of Co-morbidity*

*Overview of drug discovery, development, evaluation (clinical trials) and post-marketing surveillance. Routes and techniques for administration of medicines. Basic principles of drug action; absorption, distribution, metabolism, excretion including The impact of anatomy and physiology and pathological states upon these processes. Drug interactions and reactions both pharmacodynamics and pharmacokinetics Adverse drug reactions (ADR), including causes, monitoring and reporting thereof. Patient compliance, concordance and adherence to medication.*

*Responding to symptoms. Treatment and referral. Clinical pharmacology of drugs, dressings and appliances used for treatment of minor injuries, minor illness, health promotion and palliative care.*

*Aetiology, pathophysiology and therapeutics of selected major diseases (e.g. hyperlipidaemia, hypertension, congestive cardiac failure, type II diabetes, asthma, COPD and depression). Clinical pharmacology of the drug groups recommended in both national and local guidelines for the treatment of the aforementioned disease states. Hyperlipidaemia will serve as an exemplar. The biochemistry and physiology of blood lipoproteins will underpin an understanding of the molecular mode of action of the major classes of lipid lowering drugs (i.e. statins, fibrates and inhibitors of cholesterol absorption). Current approaches to treatment will be based upon national guidelines, local guidelines (see Indicative Websites) and illustration with national ePACT data. The impact of physiological state in, e.g. the elderly, young, pregnant or breast feeding women, on drug responses and safety as applied to prescribing practice will be considered.*

*Numerical manipulations as encountered in the prescribing and administration of drugs, including percentages, isotonicity and millimolar calculations, IV additives and biogenetics. Equivalence of dosing, and an understanding of routine pharmacokinetic principles.*

*Overview of and effective use of various sources of evidence regarding the efficacy and safe administration of drugs.*

## **Learning Activities**

Interactive lectures, workshops and tutorials  
Clinical scenarios & discussion  
CAL (Asthma: BTS Guidelines)  
Self-directed learning & practice portfolio  
Supervised practice  
Reflective practice

## **References**

<b>Course Material</b>	Book
<b>Author</b>	Cordon, M.J.
<b>Publishing Year</b>	1994
<b>Title</b>	Clinical Calculations for Nurses with Basic Mathematics Review.
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Appleton & Lange
<b>ISBN</b>	0838513670

<b>Course Material</b>	Book
<b>Author</b>	Courtenay. M. & Griffiths, M.

<b>Publishing Year</b>	2004
<b>Title</b>	Independent and Supplementary Prescribing: An Essential Guide.
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Greenwich Medical Media Ltd
<b>ISBN</b>	1841101966.

<b>Course Material</b>	Book
<b>Author</b>	Ganong, W.F.
<b>Publishing Year</b>	2005
<b>Title</b>	Review of Medical Physiology
<b>Subtitle</b>	
<b>Edition</b>	22
<b>Publisher</b>	Appleton & Lange
<b>ISBN</b>	0071440402

<b>Course Material</b>	Book
<b>Author</b>	Katzung, W.F.
<b>Publishing Year</b>	2004
<b>Title</b>	Basic & Clinical Pharmacology
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Appleton & Lange
<b>ISBN</b>	0071410929

<b>Course Material</b>	Book
<b>Author</b>	Trounce, J., Greenstein, B. & Gould, D.
<b>Publishing Year</b>	2004
<b>Title</b>	Trounce's Clinical Pharmacology for Nurses
<b>Subtitle</b>	
<b>Edition</b>	17
<b>Publisher</b>	Churchill Livingstone
<b>ISBN</b>	0443072086

## Notes

The module utilizes a physiological and pharmacological approach to the safe and current supplementary and independent prescribing for common medical conditions. It also fulfils the NMC requirements for numeracy.

The assessment for this module consists of an examination and coursework that assess both pharmacological issues and numeracy. Both elements need to be passed at an appropriate standard for a pass to be awarded for the module.