

Module Title:		Clinical Pharmacology for Advanced Practice			Level	:	7	Cred Valu		20)
Module code:		NHS782	New Existing X			Code of module being replaced:				NA	
Cost Cent	re:	GANG	JACS3 cod	CS3 code: B700							
Trimester(s) in which to be offered:			2	With	/ith effect from: Septemb			embe	per 18		
School:	Socia	al and Life Scienc	ces	Module Leader: Joanne Pike			Pike				
Scheduled learning and teaching hours Guided independent study Placement				34 hrs 106 hrs 60 hrs							
Module duration (total hours)				200 hrs							
Programme(s) in which to be offered MSc Advanced Clinical Practice (Therapies) MSc Advanced Clinical Practice									Core	9	Option ✓
MSc Health Sciences									✓ ✓		
MSc Health Sciences (Healthcare Leadership) MSc Health Sciences (Therapies)								√			
Pre-requis	sites										
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Module Aims

- 1. Develop a critical appreciation of the underpinning theoretical principles of the administration of drugs in clinical practice
- 2. Facilitate the application of principles of drug administration in clinical practice
- 3. Promote an evidence based approach to clinical practice

Key skills for employability

- KS1 Written, oral and media communication skills KS2 Leadership, team working and networking skills
- KS3 Opportunity, creativity and problem solving skills
- KS4 Information technology skills and digital literacy
- KS5 Information management skills
- KS6 Research skills
- KS7 Intercultural and sustainability skills
- KS8 Career management skills
- KS9 Learning to learn (managing personal and professional development, selfmanagement)

KS10 Numeracy

At th	e end of this module, students will be able to	Key Skills		
1	Demonstrate a thorough comprehension of drugs, their	KS1	KS2	
	pharmacology, interactions, pharmacokinetics and	KS3	KS4	
	pharmacodynamics	KS6	KS10	
2	Evaluate arguments, assumptions and concepts relevant to	KS1	KS2	
	drug administration in the advanced practice context, and synthesise questions in order to frame solutions to problems	KS3	KS4	
	encountered	KS5	KS10	
3	Competently assess medications management situations	KS1	KS2	
	based on a systematic understanding of theories and principles of medicines management in advanced clinical	KS3	KS4	
	practice and plan appropriate action	KS6	KS10	
	Evaluate the outcomes of clinical or management decisions	KS1	KS2	
4	and policy implementation based on knowledge and	KS3	KS6	
	understanding of drug administration in context	KS7	KS9	

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MODULE SPECIFICATION

Transferable/key skills and other attributes

Exercise initiative and personal responsibility

Make decisions in complex and unpredictable situations

Demonstrate communication skills necessary for advanced management of patients/clients Assess and manage risk

Demonstrate competency in word processing and the presentation of data

Demonstrate competency in the use of libraries, databases and the Internet as sources of information

Demonstrate excellent verbal and written communication skills.

Derogations

The following derogation will apply for students undertaking the MSc Health Sciences (all routes): Any work submitted which indicates unsafe practice by the student, or which breaches anonymity and/or confidentiality, will result in overall refer/defer of the module. In Addition:

Students undertaking the MSc Advanced Clinical Practice (all routes):

There will be no condonement allowed for any assessment, thus all elements of a module must be passed.

Assessment:

This module will be assessed by two tasks, both of which must be passed in order to pass the module.

- 1. A portfolio of evidence reflecting 60 hours of practice, of four scenarios detailing decisions that have been made as regards medications given under discipline-specific formularies and/or under PGD (or of referring on for medical treatment where medication is not available).
 - Example template 1: Mr Jones is a 75 year old male who has dialled 999. On arrival
 at scene, the paramedic practitioner is able to diagnose a myocardial infarction. Mr
 Jones was given aspirin and diamorphine and tenecteplase in the ambulance.
 Discuss the mode of action of the named drugs required to manage the patients'
 condition. You should include aspects such as absorption, metabolism and
 elimination and rationale for administration.
 - Example template 2: Mr James, a 68 year old man, with a history of Type 2 diabetes is 15 days post right below knee amputation. He is currently on sliding scale s/c insulin therapy to manage his brittle diabetes. He has consulted you because he is suffering with increased pain following discharge from hospital. Include a brief discussion of potential medications, side-effects, administration routes, monitoring effectiveness, contraindications, special advice or counselling and any legal and ethical issues.
 - A short evaluation of the portfolio must be included, reflecting the current drug administration patterns in clinical practice, to investigate potential for development. All learning outcomes must be evidenced within the clinical portfolio.
 - 70% of module mark



- 2. A one hour unseen examination which examines the student's knowledge and understanding of pharmacology.
 - 30% of module mark

NB. Both elements must be passed in order to pass the module.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	3,4,5	Portfolio	70%		3,000
2	1,2	Written Examination	30%	1 hr	NA

Learning and Teaching Strategies:

A variety of learning and teaching methods will be used and are designed to stimulate student enquiry and self-directed learning around the curriculum content. This includes classroom based strategies such as interactive lectures and discussions, seminars and workshops, tutorial sessions and problem-based / case-based learning supported by internet-based resources and use of the virtual learning environment Moodle. In clinical practice, an experiential strategy, including observation, guided practice and observed independent practice, will be used to meet the module outcomes.

In clinical practice an experiential strategy based on a negotiated learning contract between the student and his/her clinical mentor will be employed.

Syllabus outline:

pharmaco-dynamics and pharmacokinetics,

basic principles of drugs - absorption, distribution, metabolism and excretion, including adverse drug reactions (ADR)

interactions and reactions

patient/client compliance, concordance and drug response

impact of physiological state on drug responses and safety, e.g. in elderly people, neonates, children and young people, pregnant or breast feeding women and ethnicity,

selection and optimisation of a drug regimen for the patient condition.

impact of co-morbidities on prescribing and patient management.



Bibliography:

Essential reading

British Medical Association, Royal Pharmaceutical Society of Great Britain (Current edition) *British National Formulary*. London BMA/RPSGB

Turley, S.M. (2016) *Understanding pharmacology for health professionals 5th Ed.* Upper Saddle River, NJ: Prentice Hall

Other indicative reading

Barber, P. and Robertson, D (2015) *Essentials of pharmacology for nurses 3rd Ed*Berkshire: McGraw-Hill

Neal, M.J. (2015) Medical pharmacology at a glance Oxford: Wiley Blackwell

Rang, H.P. Ritter, J. M, Flower, R.J. and Henderson, G (eds) (2015) *Rang and Dale's Pharmacology (8th edition)* London. Churchill Livingstone.