1. **Title of the module**

LABS605 Clinical Pharmacology

1. **School or partner institution which will be responsible for management of the module**

Centre for Higher and Degree Apprenticeships (CHDA)

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 6

1. **The number of credits and the ECTS value which the module represents**

15 Credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Flexible delivery model

Autumn and/or Spring and/or Summer

1. **Prerequisite and co-requisite modules**

N/A

1. **The programmes of study to which the module contributes**

BSc (Hons) in Applied Bioscience

1. **The intended subject specific learning outcomes.
On successfully completing the module students will be able to:**

8.1 Describe evidence-based drug therapy and the significance of the randomised double-blind placebo controlled trial.

8.2 Understand what is meant by pharmacovigilance and pharmacoepidemiology.

8.3 Explain the possible sources of adverse drug interactions.

8.4 Understand the clinical pharmacology of the principal drugs used to treat infection and inflammation.

8.5 Demonstrate an understanding of how neuroactive drugs are used clinically in anaesthesia, pain management, and neurological disorders such as dementia, Parkinson’s disease, epilepsy and multiple sclerosis.

8.6 Understand the clinical use of cholinergic, anti-muscarinic, and adrenergic drugs.

8.7 Critically evaluate how the various classes of diuretics are used clinically.

8.8 Describe the use and application of antitussives and respiratory stimulants.

8.9 Explain the clinical use of pro-coagulant and anti-coagulant drugs.

8.10 Appreciate the clinical use and application of the various classes of cytotoxic drugs in the treatment of cancer.

8.11 Understand the clinical use and application of drugs that effect gastrointestinal motility.

8.12 Understand the clinical application of anti-diabetes agents and anti-thyroid drugs.

1. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**

9.1 Develop and demonstrate an ability to analyse, evaluate and correctly interpret data.

9.2 Present and communicate data effectively and confidently.

9.3 Obtain and use information from a variety of sources as part of self-directed learning.

9.4 Manage their time and use their organisation skills within the context of self-directed learning.

9.5 Develop and demonstrate an ability to work and communicate effectively with others.

1. **A synopsis of the curriculum**

Evaluation of drug effects in humans

Unwanted drug effects and adverse drug reactions

Infection and inflammation

Nervous system

Cardiorespiratory and renal systems

Blood and neoplastic disease

Gastrointestinal system

Endocrine system and metabolic disorders

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Peter Bennett, Morris Brown, and Pankaj Sharma (2015) Clinical Pharmacology. Livingstone.

1. **Learning and teaching methods**

Blended distance learning:

Contact Hours: 100 hours

Private Study Time: 50 hours

Total Learning Time: 150 hours

1. **Assessment methods**
	1. Main assessment methods

2000 word Essay – 40%

 2 hour Examination – 60%

The pass mark for each individual assessment is 40%.  All assessments must be passed in order to pass the module.

13.2 Reassessment methods

Like for Like

1. ***Module learning outcomes (sections 8 & 9) to learning and teaching methods (sectin12) and methods of assessment (section 13)***

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| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 8.7 | 8.8 | 8.9 | 8.10 | 8.11 | 8.12 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Online material/ Recorded Lectures | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  | **x** |  |
| Work-based experience | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Essay | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Examination | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  |  | **x** |

1. **Inclusive module design**

The School/Collaborative Partner *(delete as applicable)* recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Blended distance learning – delivered from Medway or Canterbury campus

1. **Internationalisation**

Clinical Pharmacology is a core component of the Pharmaceutic R & D industry and this module reflects international aspects. With regards to the intended learning outcomes, in particular 8.2 and 8.3, the target learning outcomes within this module are applicable worldwide as part of the universal principles of pharmacology. With regard to subject content, the material within the syllabus is applied to a wide range of international contexts, where it draws on and compares current standards and regulations across Europe.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

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| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
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