1. **Title of the module**

LABS602 Drug Discovery and Development

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

BSc (Hons) in Applied Chemical Sciences

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

8.1 Critically evaluate the drug discovery process.

 8.2 Understand the role of bioinformatics and genomics in the drug discovery process.

 8.3 Discuss and place into context the use of high-throughput-screening in the drug discovery process.

8.4 Understand the importance of pharmacology in the drug discovery process.

8.5 Develop an understanding of how drug safety is assessed.

8.6 Develop an understanding of how drugs are evaluated in human clinical trials.

8.7 Understand the role of intellectual property in drug discovery.

* 1. Understand the role of regulatory affairs and drug approval for use in the clinic.
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**

History and development of the pharmaceutical industry

Therapeutic modalities

General principles in the drug discovery process

Drug targets

The role of bioinformatics and genomics

High throughput screening

The role of pharmacology in drug discovery

Assessing drug safety

Clinical trials

Intellectual property and drug discovery

Regulatory affairs and drug approval

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

Ray Hill and Humphrey Rang (2012) Drug Discovery and Development: Technology in Transition. Elsevier.

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 | 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** |  |
| Private Study | **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** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Research Design and Statistics assignment | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Examination | **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**

Drug Discovery and Development 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 8.5 and 8.6, the target learning outcomes within this module are applicable worldwide as part of the universal principles of Bioscience. With regard to subject content, the material within the syllabus is applied to a wide range of international contexts.

**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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