1. **Title of the module**

BIOS8400 (BI840) – Cancer Therapeutics: From the Laboratory to the Clinic

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

Division of Natural Sciences

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

Level 7

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)**

Spring

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

None

1. **The course(s) of study to which the module contributes**

Compulsory for MSc Cancer Biology and Therapeutics

Optional for MSc Biomedicine; MSc Biotechnology and Bioengineering; and MSc Biotechnology and Business

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

8.1 Demonstrate comprehensive understanding and critically evaluate current clinical management of cancer.

8.2 Demonstrate a critical appreciation of stages of pharmaceutical development in harnessing laboratory-based research through pre-clinical and in vivo evaluation and clinical trials.

8.3 Demonstrate a broad understanding of the industrial and regulatory processes that lead to the licensing of therapeutic drugs.

8.4 Demonstrate knowledge and understanding of the development of specific therapeutic agents and the complex processes that determine progression from the bench to the clinic, for instance small chemical entities and antibody conjugates.

8.5 Demonstrate cutting-edge understanding and knowledge of the complexity of personalisation of medicine in the “omics” era.

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

9.1 Demonstrate the ability to organise information clearly, present information in a variety of forms, and adapt presentation for different audiences.

9.2 Interpret data accurately, marshalling information from published sources, and critically evaluate their own research and that of others.

9.3 Make use of constructive informal feedback from staff and peers and assess own progress to enhance performance and personal skills.

9.4 Demonstrate an ability to manage their time and workload efficiently to meet personal targets and imposed deadlines.

9.5 Demonstrate a professional ability to use appropriate technology to retrieve, analyse and present information.

1. **A synopsis of the curriculum**

This module provides students with critical perspectives upon current and emerging cancer therapies, how they are developed, and how they are applied in the clinical setting. The harnessing of scientific knowledge in the treatment of disease requires a complex series of highly regulated studies that must be performed under highly regulated legal and ethical frameworks. This module reviews the transition from promising cancer therapy to fully realised therapeutic agent, using specific therapies as examples. It will also discuss the emerging potential for personalised medicine based on patient-specific molecular biomarkers.

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

Ritter, J.M. et al. (2019). *Rang and Dale’s Pharmacology*, Nineth Edition. London: Elsevier

1. **Learning and teaching methods**

Total Contact Hours: 27

Total Private Study Hours: 123

Total Study Hours: 150

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

* Essay (1,000 words) – 50%
* Report (2,000 words) – 50%

13.2 Reassessment methods

* Like for like

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *9.1* | *9.2* | *9.3* | *9.4* | *9.5* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Lecture | **x** | **x** | **x** | **x** | **x** |  |  |  |  |  |
| Seminar | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |  |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| Essay | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Report | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

1. **Inclusive module design**

The Division 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**

Canterbury

1. **Internationalisation**

Biosciences is an international discipline. This module presents subject-specific knowledge, research approaches and techniques, generated, developed and refined by scientists around the world. Mastery of the learning outcomes will equip students to apply the theories and techniques of the module in a wide range of international contexts. In compiling the reading list, consideration has been given to the range of texts that are available internationally and a selection has been identified to complement the delivery of the material. The School of Biosciences is an international community of students and staff. Group activities e.g. in practicals, tutorials, workshops and self-study will naturally draw on the international make-up of the student body; the module teaching team includes members with international experience of teaching and research collaboration.

**DIVISION 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) |
| 09/01/2019 | Minor | September 2019 | 7, 11 | No |
| 20/11/20 | Minor | September 2021 | 12 | No |

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| Revised FSO Jan 2018 |