1. **Title of the module**

PSCI3180 (PS318) - Skills for Forensic Scientists

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

Physical Sciences

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

Level 4

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)**

Autumn and Spring

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

None

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

BSc/MSci Forensic Science

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
2. Display knowledge and understanding of core and foundation scientific physical, biological, and terminology, units, conventions, in relation to forensic science.
3. Areas of bioscience including cells, biochemistry, human DNA.
4. Demonstrate numeracy skills (including data analysis and statistics).
5. Understand the theory and practice of incident investigation, evidence recovery and preservation.
6. Display a basic understanding of the English legal system and laws of evidence.
7. Demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to the subject and to apply such knowledge and understanding to the solution of qualitative and quantitative problems.
8. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
9. Solve problems, relating to qualitative and quantitative information, extending to situations where evaluations have to be made on the basis of limited information.
10. Use numeracy and computational skills, including such aspects as error analysis, order-of-magnitude estimations, correct use of units and modes of data presentation.
11. Use information-technology skills such as word-processing and spreadsheet use, data-logging and storage, Internet communication, etc.
12. Use Interpersonal skills, relating to the ability to interact with other people and to engage in team working.
13. Use time-management and organisational skills, as evidenced by the ability to plan and implement efficient and effective modes of working.
14. **A synopsis of the curriculum**

Quantitative skills beginning with GCSE mathematics through to algebra, data analysis, graphical treatment of errors, logarithms, basic probability, trigonometry and applications in forensic science.

Incident scene assessment, management and mapping, including working in our new crime scene house and garden.

Induction to the English legal system and laws of evidence.

The structure and composition of DNA, genetic analysis and applications relevant to forensic science.

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

* Essential Mathematics and Statistics for Forensic Science - Adam, 2010, Wiley
* Maths for Chemistry: A Chemist's Toolkit of Calculations - Monk, 2010, OUP
* Criminalistics: An Introduction to Forensic Science - Saferstein, 2014, Pearson
* Crime Scene to Court: The Essentials of Forensic Science - White, 2016, RSC
* Practical Skills in Forensic Science - Langford, 2018, Pearson
* Forensic Science – Jackson and Jackson, 2016, Pearson
* An Introduction to Forensic Genetics - Goodwin, 2010, Wiley
* Evidence - Munday, 2017, OUP
* Forensic Chemistry - Bell, 2013, Pearson

1. **Learning and teaching methods**

Total contact hours: 47

Private study hours: 103

Total study hours: 150

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

Incident Mapping Practical Work (6 hours 30%)

Law Assignment (1 hour 20%)

DNA Assignment (1 hour 20%)

Maths Assignment (1 hour 10%)

Maths in-course test (45 mins 20%)

The maths assignment and the maths in-course test are a compulsory sub-element. The Incident Mapping Practical Work is a compulsory sub-element. In order to pass the module it is compulsory to pass the sub-elements.

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 | 8.6 | 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** |
| Lectures | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |
| Incident Mapping Practical Work | **x** |  | **x** |  |  | **x** | **x** |  |  | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |
| Incident mapping | **x** |  | **x** | **x** |  | **x** | **x** |  |  | **x** | **x** |
| Law assignment |  |  |  |  | **x** |  |  |  |  |  | **x** |
| DNA assignment | **x** | **x** |  |  |  |  |  |  |  |  | **x** |
| Maths assignment | **x** |  | **x** |  |  | **x** | **x** | **x** | **x** |  | **x** |
| Maths in course test | **x** |  | **x** |  |  | **x** | **x** | **x** |  |  | **x** |

1. **Inclusive module design**

The School 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**

Discussion in lectures of international collaborations, units and databases relevant to the forensic sciences. The teaching content and experiences of the academic staff strongly reflect the universities emphasis on internationalisation, and delivering content appropriate to our internationally-diverse student body.

**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.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 27/02/19 | MAJOR | September 2019 | 6,7,8,9,11,13,14 | no |
|  |  |  |  |  |