Confirmation that this version of the module specification has been approved by the School Learning and Teaching Committee:

………19th June 2015………………………………………….

**MODULE SPECIFICATION**

1. Title of the module

Skills for Forensic Scientists - PS318

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

School of Physical Sciences

1. Start date of the module

Revision of existing module, next running in 2015-16

1. The number of students expected to take the module

100

1. Modules to be withdrawn on the introduction of this proposed module and consultation with other relevant Schools and Faculties regarding the withdrawal

None. Existing module

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

Level 4

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

15 (7.5)

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

Terms 1 and 2

1. Prerequisite and co-requisite modules

None

1. The programmes of study to which the module contributes

BSc/MSci Forensic Science/Forensic Chemistry

This is not available as a wild module

1. The intended subject specific learning outcomes
   1. Core and foundation scientific physical, biological, and terminology, units, conventions, in relation to forensic science.(1)
   2. Areas of bioscience including cells, biochemistry, human DNA. (4)
   3. Numeracy (including data analysis and statistics) (5)
   4. Incident investigation, evidence recovery, preservation.(6)
   5. Ability to 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)
2. The intended generic learning outcomes
   1. Problem-solving skills, relating to qualitative and quantitative information, extending to situations where evaluations have to be made on the basis of limited information.(22)
   2. Numeracy and computational skills, including such aspects as error analysis, order-of-magnitude estimations, correct use of units and modes of data presentation, (23)
   3. Information-technology skills such as word-processing and spreadsheet use, data-logging and storage, Internet communication, etc. (25)
   4. Interpersonal skills, relating to the ability to interact with other people and to engage in team working within a legal or other professional environment. (26)
   5. Time-management and organisational skills, as evidenced by the ability to plan and implement efficient and effective modes of working. (27)

1. 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.

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. Indicative Reading List

*Essential mathematics and statistics for forensic science* - Adam, Craig, 2010

*Maths for chemistry: a chemist's toolkit of calculations* - Monk, Paul M. S.,

*Criminalistics: an introduction to forensic science* - Saferstein, Richard, 2007

*Crime scene to court: the essentials of forensic science* - White, Peter, 2010

*Practical skills in forensic science* - Langford, Alan, 2010

*Forensic science* - Jackson, Andrew R. W., Jackson, Julie M., 2011

*An introduction to forensic genetics* - Goodwin, William, Linacre, Adrian, Hadi, Sibte, 2011

*Evidence* - Munday, R. J. C., 2013

*Forensic chemistry* - Bell, Suzanne, 2013

1. Learning and Teaching Methods, including the nature and number of contact hours and the total study hours which will be expected of students, and how these relate to achievement of the intended module learning outcomes

14 hours of lectures on quantitative skills (11.1, 11.3, 11.5, 11.6, 12.1, 12.2, 12.3, 12.5)

3 hours of lectures on incident –scene assessment and management and lecture on incident–scene mapping, (11.4)

6 three-hour incident mapping practical sessions. (11.4, 12.4, 12.5)

6 hours of lectures on the basic structure and composition of DNA; Forensic Applications. (11.1, 11.2)

6 hours of lectures on The English Legal System & Legal Process (11.1, 11.5, 12.5)

There are 47 contact hours and approximately 103 hours of independent study associated with this module.

1. Assessment methods and how these relate to testing achievement of the intended module learning outcomes

The module will be assessed on the basis of 100% coursework which will test all learning outcomes.

Quantitative Skills, 14 assignments (30%) (Students must obtain an average of at least 40% to pass the module). (11.1, 11.3, 11.5, 11.6, 12.1, 12.2, 12.3, 12.5)

DNA Assignment (20%) (11.1, 11.2)

Incident mapping practical work (30%) - compulsory element. (11.4, 12.4, 12.5)

Law Assignment (20%) .(11.1, 11.5, 12.5)

1. Implications for learning resources, including staff, library, IT and space

Uses existing resources

1. The School recognises and has embedded the expectations of current disability equality legislation, and supports students with a declared disability or special educational need in its teaching. Within this module we will make reasonable adjustments wherever necessary, including additional or substitute materials, teaching modes or assessment methods for students who have declared and discussed their learning support needs. Arrangements for students with declared disabilities will be made on an individual basis, in consultation with the University’s disability/dyslexia support service, and specialist support will be provided where needed.
2. Campus where module will be delivered: Canterbury