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**

PS502 Forensic Archaeology

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 2015-16

1. **The number of students expected to take the module**

120

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 **Modules to be withdrawn on the introduction of this proposed module and consultation with other relevant Schools and Faculties regarding the withdrawal**

None

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

Level 5

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)**

2

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

None

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

Forensic Science, Forensic Chemistry

This is available as a wild module

1. **The intended subject specific learning outcomes** 
   1. Knowledge of the principle areas of forensic archaeology including dating, detection and osteology. (FS Programme learning outcome 1)
   2. Ability to demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to forensic archaeology. (FS Programme learning outcome 8)
   3. Ability to apply such knowledge and understanding to the solution of problems. (FS Programme learning outcome 5)
2. **The intended generic learning outcomes** 
   1. Problem-solving skills, relating to qualitative and quantitative information (FS Programme learning outcome 22)
   2. Numeracy and computational skills (FS Programme learning outcome 23)
3. **A synopsis of the curriculum**

Dating : Radioactive decay and detection of radiation, radiocarbon dating and related methods, accelerator mass spectrometry, uranium series dating, potassium-argon dating, radioactive tracers, isotope dilution, neutron activation, stable isotope techniques with forensic applications, electron spin resonance spectroscopy, thermoluminescence dating and thermal history, Lindow Man, detection of irradiated food.

Detection : Magnetometry, metal detectors, resistivity surveys, ground penetrating radar, aerial photography, and remote sensing.

Osteology : The study of human osteology is fundamental to the discipline of forensic anthropology. This series of lectures begins by examining the structure, growth, and function of bones and teeth. Methods of skeletal analysis in forensic anthropology are then examined, including age, sex, stature, trauma, disease, and race. Applications in biological anthropology will also be reviewed. This section of the course will include a laboratory practical.

1. **Indicative Reading List**

Zumdahl, Chemical Principles

Byers, S. 2005. Introduction to forensic anthropology. London : Pearson/Allyn and Bacon.

White, T.D. 2000. Human Osteology. San Diego, California, London : Academic Press Inc.

J. Hunter & M. Cox, 2005. Forensic Archaeology. Routledge, London, 2005 - chapter 3

E.W. Killam. 2004. The Detection of Human Remains. Charles Thomas, Springfield - chapters 5-8

T.L. Dupras, J.J. Schultz, S.M. Wheeler & L.J. Williams. 2006. Forensic Recovery of Human Remains. Taylor and Francis, Boca Raton - chapter 4

A. Clark. 1990. Seeing Beneath the Soil. Batsford, London.

White, T.D., Black, M.T., Folkens, P.A. 2011. Human Osteology. San Diego, California, London : Academic Press Inc.

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**

22 hours lectures (11.1-11.3, 12.1, 12.2) supported by 128 private study in order to achieve all the intended learning outcomes. Total study hours 150.

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

Written examination 70% (length 2 hours); Coursework 30%

The above assessments test students’ knowledge and understanding of facts, theories and principles (11.1, 11.2) and application of techniques to solve numerical problems (11.3, 12.1, 12.2).

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

None, existing module

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(es) or Centre(s) where module will be delivered:**

Canterbury