1. **Title of the module**

SACO8013 (SE8013) Skeletal Functional Morphology

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

School of Anthropology and Conservation

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 programmes of study to which the module contributes**

MSc Biological Anthropology

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

8.1 Demonstrate an advanced understanding of bone biology and physiology as it relates to function.

8.2 Demonstrate an advanced understanding of the biomechanical principles that influence skeletal morphology.

8.3 Demonstrate an advanced ability to summarise major anatomical differences between skeletons of different primate clades.

8.4 Demonstrate a comprehensive understanding of how anatomists reconstruct locomotor and manipulative behaviour from the skeleton.

8.5 Demonstrate an advanced ability to critically evaluate scientific papers and contribute to academic discussions and debates.

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

9.1 Demonstrate advanced critical reasoning and writing skills.

9.2 Demonstrate advanced presentation skills.

9.3 Demonstrate advanced interpersonal skills such as the ability to discuss critically and debate topics with peers

9.4 Demonstrate advanced learning and study skills as a result of independent scholarly research into particular topics.

1. **A synopsis of the curriculum**

The skeletons of living primates are adapted to the functional requirements of locomotor and manipulative behaviours that allow them to successfully navigate their environments. Similarly, the behaviour of extinct primates, including fossil human ancestors, can be reconstructed through comparisons to living species in concert with the biomechanical principles influencing skeletal morphology. In this module, students will learn detailed aspects of bone biology that relate to function and participate in a comparative analysis of skeletal morphology among major primate clades. This knowledge will then be applied to assessments of skeletal functional morphology in fossil human ancestors relating to both locomotion and manipulative behaviours. Module material will be reinforced through a project report interpreting a ‘mystery’ fossil and an in-class practical exam*.*

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

Aiello, L and Dean, C (1990) An Introduction to Human Evolutionary Anatomy. Academic Press, pp.596.

Biewener AA (1989) Scaling body support in mammals: limb posture and muscle mechanics. Science 245: 45-48.

Curry, J (1984) The Mechanical Adaptations of Bone. Princeton University Press, pp. 294

Jungers WL, Grabowski M, Hatala KG, Richmond BG (2016) The evolution of body size and shape in the human career. Phil Trans R Soc B 371:20150247.

Marzke MW (1997) Precision grips, hand morphology, and tools. Am J Phys Anthropol 102: 91-110.

Ward CV (2002) Interpreting the posture and locomotion of Australopithecus afarensis: Where do we stand? Yrbk Phys Anthropol. 45: 185-215.

1. **Learning and teaching methods**

Total contact hours: 24

Private study hours: 126

Total study hours: 150

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

Project report (4000 words) - 80%

Seminar leadership (once) - 20%

13.2 Reassessment methods

100% coursework

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

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| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 9.1 | 9.2 | 9.3 | 9.4 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |
| **Private Study** | X | X | X | X | X | X |  |  | X |
| Lecture/seminar | X | X | X | X | X | X | X | X | X |
| Laboratory | X | X | X | X |  | X |  | X | X |
| **Assessment method** |  |  |  |  |  |  |  |  |  |
| Project report | X | X | X | X | X | X | X |  | X |
| Seminar lead | X | X | X | 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**

The reading list is comprised of research produced by prominent international research groups, including international collaborative efforts.

**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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