1. KentVision Code and title of the module

SACO8170 Growth and Disease of the Human Skeleton

## Division and School/Department or partner institution which will be responsible for management of the module

Division of Human and Social Sciences, School of Anthropology and Conservation

## The level of the module (Level 4, Level 5, Level 6 or Level 7)

Level 7

## The number of credits and the ECTS value which the module represents

15 credits (7.5 ECTS)

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

Autumn

## Prerequisite and co-requisite modules and/or any module restrictions

None

## The course(s) of study to which the module contributes

* MSc Forensic Osteology and Field Recovery Methods

## The intended subject specific learning outcomes. On successfully completing the module students will:

8.1 Have a conceptual and advanced knowledge of human skeletal growth and development.

8.2 Have an advanced understanding of enamel and bone histology, and the application of histology in Forensic Anthropology

8.3 Be able to identify, diagnose, and interpret human skeletal disease and trauma.

8.4 Gain advanced understanding of the research themes in Forensic Anthropology.

8.5 Be able to critically evaluate new histological and macroscopic research into human skeletal disease.

## The intended generic learning outcomes. On successfully completing the module students will:

9.1 Be able to critically evaluate published research and problem solve.

9.2. Be able to learn independently and successfully time management skills.

9.3. Be able to organise and present of information in a clear and concise manor.

9.4. Have gained advanced development of laboratory and practical skills.

9.5. Have gained further development of communication both orally and in writing.

## A synopsis of the curriculum

This module will give students an in-depth knowledge of the histological mechanisms underpinning the growth of human bones and teeth. These mechanisms will be linked to diseases processes. This will provide a foundation to identify the surface manifestations of disease that can be seen macroscopically. Students will learn the criteria needed to identify a selection of skeletal diseases. Upon completion, students will have gained theoretical knowledge about the causes of disease, and practical 'hands on' experience identifying and diagnosing skeletal disease, both microscopically and macroscopically.

## Reading list

## The University is committed to ensuring that core reading materials are in accessible electronic format in line with the Kent Inclusive Practices.

## The most up to date reading list for each module can be found on the university's [reading list pages](https://kent.rl.talis.com/index.html).

* Burr DB, Allen MR. 2014. Basic and Applied Bone Biology. Amsterdam: Elsevier Academic Press.
* Glorieux FH, Pettifor JM, Juppner H. 2012. Pediatric Bone Biology and Diseases. Amsterdam: Elsevier Academic Press.
* Nanci A. 2013. Ten Cate’s Oral Histology. Development Structure and Function, 8th ed. St. Louis: Mosby Year Book.
* Mahoney P. 2011. Human deciduous mandibular molar incremental enamel development. Am J Phys
* Anthropol 144, 204–214.
* Mahoney P. 2012. Incremental enamel development in modern human deciduous anterior teeth. Am J Phys Anthropol 147,637–651.
* Ortner, D.J. and Putchar, W.G.J. 1985 Identification of pathological conditions in human skeletal remains Smithsonian Institution Press.
* Reinhard Dettmeyer. 2011. Forensic Histopathology: Fundamentals and Perspectives. Springer Berlin Heidelberg.
* Schmidt C, Symes R. 2015. The Analysis of Burned Human Remains, 2nd Edition. Academic Press.

## Contact Hours

Private Study: 126

Contact Hours: 24

Total: 150

## Assessment methods

* 1. Main assessment methods
* \* Lab Report (3500 words) 70%
* 15 minute Lab Quiz 1 10%
* 15 minute Lab Quiz 2 10%
* 15 minute Lab Quiz 3 10%

***\**** *This element is pass compulsory and must be passed to achieve the learning outcomes of the module.*

13.2 Reassessment methods

* Like for like.

## Map of module learning outcomes (sections 8 and 9) to learning and teaching methods and methods of assessment (section 13)

**Module learning outcomes against learning and teaching methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Private Study | **x** | **x** |  | **x** | **x** |  | **x** |  |  |  |
| Lecture | **x** | **x** |  | **x** | **x** |  |  |  |  |  |
| Laboratory | **x** | **x** | **x** |  |  | **x** |  | **x** | **x** | **x** |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lab Report | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Lab Quizzes | **x** | **x** | **x** | **x** |  | **x** | **x** |  |  |  |

## 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

## Campus(es) or centre(s) where module will be delivered

Canterbury

## Internationalisation

Methods (bone and tooth histology) learned in this module will have international application in forensic anthropology. The reading list is comprised of internationally recognised journals.

Background aetiology of many diseases covered in this module are from areas outside the UK and have travelled to the UK from various pathways. These theories will be explored though the lab practicals and lab report.

**DIVISIONAL USE ONLY**

**Module record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

| **Date approved** | **New/Major/Minor revision** | **Start date of delivery of (revised) version** | **Section revised (if applicable)** | **Impacts PLOs  (Q6 & 7 cover sheet)** |
| --- | --- | --- | --- | --- |
| 21.07.21 | Minor | September 2021 | 13,14 | No |
|  |  |  |  |  |