

## **ANTH 5322 Topics in Anthropology: Forensic Anthropology**

**Spring 2023**

**Prof. Christina Cheung**

Lecture: Monday 2:30pm – 4:15pm, Venue: NAH\_11

Tutorial: Monday 4:30pm - 5:15pm, Venue:TBC

**Suggested textbook:** Byers, SN (2017) Introduction to Forensic Anthropology. Routledge.

**Course description:** Interest in the field of forensic anthropology has been heightened in the last decade through the success of forensic-themed television shows and popular novels. This course will introduce students to the field of forensic anthropology – a scientific discipline that involves the application of methods from biological anthropology and archaeology to the identification, recovery, and analysis of skeletal remains from crime scenes, mass disasters, and unexplained death. Through lectures and in-class assignments, students will learn about the methods for recognizing and recovering evidence that allows for the determination of time since death, manner and cause of death, and the identification of individuals.

### **Learning outcomes:**

By the end of this course, student will:

- Have a foundational understanding of basic skeletal biology, and are able to identify the bones and specific features of various skeletal elements of the adult and subadult human skeletons.
- Learn about how osteological methods can be used to create a biological profile, and help identify possible cause and manner of death.
- Gain new perspectives into the strengths and weaknesses of standard forensic anthropology methods.
- Understand the ethical issues that arise when working with human remains from a medico-legal context.

### **Course structure and learning activities:**

Two 1-hour lectures and one 45-min tutorial per week for one semester. Tutorial will take various forms, including a field trip to visit the Hong Kong Museum of Medical Sciences (pending COVID restrictions).

### Course assessment and polices:

The final grade for the course is based on:

1) Lab assignments	5% x 6	30%
2) Midterm Exam 1	15%	15%
3) Midterm Exam 2	15%	15%
4) Final Exam	20%	20%
5) Research paper	20%	20%

There are several in-class assignments. Each assignment will consist of written exercise to be completed during tutorial and will be based on laboratory methods commonly used in forensic anthropology. Students may work together.

The exams will be based heavily on the lecture material and your notes from the in-class lectures will be your primary study materials. Required readings for each week is provided in the weekly schedule below. In addition to these readings, students are highly encouraged to reading the associated chapter(s) from the suggested textbook.

Detailed information about the final research paper will be provided in class.

### Submission and academic honesty

As required by the university, from Sept. 2008, students must submit a soft copy of their computer-generated text assignments to VeriGuide at a specified URL. The system will issue a receipt containing a declaration of honesty statement. Students should sign the receipt, print a hard copy of their assignment, and submit the hard copy and the receipt to teachers for grading. The university says that assignments without the receipt will not be graded.

Please check the website “Honesty in Academic Works” at:  
<http://www.cuhk.edu.hk/policy/academichonesty/>

for more information on plagiarism and on how to submit papers through VeriGuide.

### Grade descriptors

Grade	Overall course
A	Outstanding performance on all learning outcomes.
A-	Generally outstanding performance on all (or almost all) learning outcomes.

B	Substantial performance on all learning outcomes, OR high performance on some learning outcomes which compensates for less satisfactory performance on others, resulting in overall substantial performance.
C	Satisfactory performance on the majority of learning outcomes, possibly with a few weaknesses.
D	Barely satisfactory performance on a number of learning outcomes.

**Weekly schedule** (this syllabus is subject to change)

Week	Date	Lecture Topic	Chapter
1	Jan 9	<b>1. Introduction to Forensic Anthropology</b> Cattaneo 2007 – Forensic Anthropology: Developments of a Classical Discipline in the New Millennium. <i>Forensic Science International</i> 165(2-3): 185-193. <a href="https://doi.org/10.1016/j.forsciint.2006.05.018">https://doi.org/10.1016/j.forsciint.2006.05.018</a>	1
2	16	<b>2. Human Osteology</b> Rissech 2021 – The Importance of Human Anatomy in Forensic Anthropology. <i>European Journal of Anatomy</i> 25(S2): 1-18.	2
3	23	<b>Lunar New Year</b>	
4	30	<b>3. Establishing Forensic Contexts</b> Blau 2018 – It’s All About The Context: Reflections on the Changing Role of Forensic Anthropology in Medico-Legal Death Investigations. <i>Australian Journal of Forensic Sciences</i> 50(6): 628-638 <a href="https://doi.org/10.1080/00450618.2017.1422022">https://doi.org/10.1080/00450618.2017.1422022</a>	3 and 4
5	Feb 6	<b>4. Estimating Time Since Death</b> Wescott 2018 – Recent Advances in Forensic Anthropology: Decomposition Research. <i>Forensic Sciences Research</i> 3(4): 278-293. <a href="https://doi.org/10.1080/20961790.2018.1488571">https://doi.org/10.1080/20961790.2018.1488571</a>	5
6	13	<b>5. Initial Treatment and Examination</b> Mundorff 2011 – Integrating Forensic Anthropology into Disaster Victim Identification. <i>Forensic Science, Medicine, and Pathology</i> 8: 131-139. <a href="https://doi.org/10.1007/s12024-011-9275-0">https://doi.org/10.1007/s12024-011-9275-0</a>	6
7	20	<b>6. Sex Determination</b> Krishan, Chatterjee, Kanchan, Kaur, Baryah, & Singh 2016 – A Review of Sex Estimation Techniques during Examination of Skeletal Remains in Forensic	8

		Anthropology Casework. <i>Forensic Science International</i> 261:162.e1-165.e8 <a href="https://doi.org/10.1016/j.forsciint.2016.02.007">https://doi.org/10.1016/j.forsciint.2016.02.007</a>	
8	27	<b>7. Age Determination</b> Ubelaker & Khosrowshahi 2019 – Estimation of Age in Forensic Anthropology: Historical Perspective and Recent Methodological Advances. <i>Forensic Sciences Research</i> 4(1): 1-9 <a href="https://doi.org/10.1080/20961790.2018.1549711">https://doi.org/10.1080/20961790.2018.1549711</a>	9
9	Mar 6	<b>Reading Break</b>	
10	13	<b>8. Stature Determination</b> Krishan, Kanchan, Menezes, & Ghosh 2012 – Forensic Anthropology Casework – Essential Methodological Considerations in Stature Estimation. <i>Journal of Forensic Nursing</i> 8(1): 45-50. <a href="https://doi.org/10.1111/j.1939-3938.2011.01122.x">https://doi.org/10.1111/j.1939-3938.2011.01122.x</a>	10
11	20	<b>9. Ancestry Determination</b> Dunn, Spiros, Kamnikar, Plemons, & Hefner 2020 – Ancestry Estimation in Forensic Anthropology: A Review. <i>WIREs Forensic Science</i> 2(4): e1369 <a href="https://doi.org/10.1002/wfs2.1369">https://doi.org/10.1002/wfs2.1369</a>	7
12	27	<b>10. Cause and Manner of Death</b> Baraybar & Gasior 2006 - Forensic Anthropology and the Most Probable Cause of Death in Cases of Violations Against International Humanitarian Law: An Example from Bosnia and Herzegovina. <i>Journal of Forensic Sciences</i> 51(1): 103-108 <a href="https://doi.org/10.1111/j.1556-4029.2005.00035.x">https://doi.org/10.1111/j.1556-4029.2005.00035.x</a>	11 – 14
13	April 3	<b>11. Ante- and Post- Mortem Skeletal Conditions</b> Blau 2016 – How Traumatic: A Review of the Role of the Forensic Anthropologist in the Examination and Interpretation of Skeletal Trauma. <i>Australian Journal of Forensic Sciences</i> 49 (3): 261-280. <a href="https://doi.org/10.1080/00450618.2016.1153715">https://doi.org/10.1080/00450618.2016.1153715</a>	15 – 18
14	17	<b>12. Summary</b> Dirkmaat, Cabo, Ousley, & Symes 2008 – New Perspectives in Forensic Anthropology. <i>American Journal of Physical Anthropology</i> 137 (S47): 33-52 <a href="https://doi.org/10.1002/ajpa.20948">https://doi.org/10.1002/ajpa.20948</a>	19
	TBA	<b>Final Exam</b>	

### Topics for tutorials:

Week 1: No tutorial

Week 2: *Film: Forensics: The Real CSI – Standard of Evidence*

Week 3: Lunar new year

Week 4: *Film: Written in Bone*

Week 5: Midterm Exam 1

Week 6: Field trip to the Hong Kong Museum of Medical Sciences (pending COVID restrictions)

Week 7: Assignment – Estimating Sex

Week 8: Assignment – Estimating Age

Week 9: Reading Break

Week 10: Assignment – Estimating Stature

Week 11: Assignment – Estimating Ancestry

Week 12: Midterm Exam 2

Week 13: *Film: Finding Anastasia*

Week 14: Assignment – Individualization