**Course description**

This course reviews in detail human skeletal anatomy for the proper identification of the bones in the body, their biomechanical articulations and their relationship with the muscular system. Focus is then directed to studying forensic methods and techniques for the estimation of age at death, determination of sex, assessment of type of bone remodeling, identification of cultural modifications to bone, and of the impact of environmental processes on bony tissue. Hands-on laboratory sessions will involve team analysis of human remains from the comparative collection in the Archaeology Laboratory at Brandeis.

**Learning goals**

The aim of the course is for students to have full command of human skeletal anatomy and of basic forensic techniques, to learn how to do teamwork during the class project, and to learn how to design and carry out scientifically oriented research. The latter involves the empirical collection of data, the use of both quantitative and qualitative analyses, the formulation of explicitly stated hypotheses, and their rejection on the bases of the analysis of evidence. Furthermore, students will have the opportunity to practice their writing skills by submitting an analytical and interpretative report.

**Course plan**

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Topics</th>
<th>Readings</th>
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</thead>
<tbody>
<tr>
<td>Jul M 8</td>
<td>Introduction to the course Generalities</td>
<td>None</td>
</tr>
<tr>
<td>Jul T 9</td>
<td>The Skull</td>
<td>Schwartz pp. 1-12 and Chapters 2-3</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>References</td>
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<tr>
<td>Jul Th 11</td>
<td>The Skull</td>
<td>Schwartz pp. 1-12 and Chapters 2-3</td>
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<tr>
<td>Jul M 15</td>
<td>Dentition</td>
<td>Schwartz Chapter 7</td>
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<td>Jul T 16</td>
<td>Postcranium: Axial skeleton</td>
<td>Schwartz Chapter 4</td>
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<tr>
<td>Jul Th 18</td>
<td>Postcranium: Upper extremities</td>
<td>Schwartz Chapter 5</td>
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<tr>
<td>Jul T 23</td>
<td><strong>First exam</strong></td>
<td>None</td>
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<td></td>
<td>Lab research project begins</td>
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<tr>
<td>Jul Th 25</td>
<td>Assessment of age at death</td>
<td>Ubelaker 1989 pp. 63-95</td>
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<tr>
<td>Jul M 29</td>
<td>Assessment of sex</td>
<td>Ubelaker 1989 pp. 52-60</td>
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<td><strong>Documentary: True Story of J. Merrick</strong></td>
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<td>Aug Th 1</td>
<td>Cultural and natural skeletal modification</td>
<td>Ubelaker pp. 96-107</td>
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<td></td>
<td><strong>Draft of report due</strong></td>
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<tr>
<td>Aug M 5</td>
<td><strong>Second exam</strong></td>
<td>None</td>
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<tr>
<td></td>
<td>Commented draft returned</td>
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<tr>
<td></td>
<td><em>Video “Mystery of First Americans”</em></td>
<td></td>
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<tr>
<td></td>
<td>(review due on Thursday August 8)</td>
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<tr>
<td>Aug F 9</td>
<td>Lab cleaning session</td>
<td>None</td>
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<tr>
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<td><strong>Research paper due (no later than 5pm)</strong></td>
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**Critical dates**

- July 23, 2019 – First exam
- August 1, 2019 – Draft of report due
• August 5, 2019 – Second exam
• August 8, 2019 – Review of documentary “Mystery of First Americans”
• August 9, 2019 - Final version of report due

**LATTE**
LATTE is the Brandeis on-line course website and the course will be managed through it. All the reading materials and the two documentaries required for the class are available there. Assignment submissions, course related announcements, and any and all syllabus changes will be also communicated via LATTE. Login using your UNET ID and password at [http://latte.brandeis.edu](http://latte.brandeis.edu).

**Students with extra challenges**
Brandeis seeks to welcome and include all students. If you need accommodations as outlined in an accommodations letter, please talk with me and present your letter as soon as you can. I want to support you. In order to provide test accommodations, please submit the letter more than 48 hours in advance. I want to provide your accommodations, but cannot do so retroactively. If you have questions about documenting a disability or requesting accommodations, please contact Student Accessibility Support (SAS) at 781.736.3470 or [access@brandeis.edu](mailto:access@brandeis.edu).

**Four-Credit Course (with three hours of class-time per week)**
Success in this 4-credit hour course is based on the expectation that students will spend a minimum of 9 hours of study time per week in preparation for class (readings, response to questions, preparation for discussions, writing of papers, preparation for exams, etc.).

**Class attendance**
Attendance to class is obligatory. Absence from classes will only be accepted in cases of medical or extreme emergencies, and should be notified in person or by email prior to the intended missed class.

**Reading assignments**
Reading assignments should be completed by the dates indicated above. The assigned readings on skeletal anatomy should be done while studying the comparative collection in the Lab. Reading of all assigned materials is essential for your engagement in class.

**Written assignment**
There is one written review of the video *Mystery of the First Americans*. The review should have a maximum of three double-spaced typed and numbered pages. It needs to address three points: 1) A synthetic summary of the core ideas (half page), a critical evaluation of the main points (two pages), and a general assessment of the effectiveness of the video (half page). In order to critically evaluate the main point, students need to engage the authors listed in the bibliography below (Owsley and Jantz 2001; Jones and Harris 1998; Meighan and Gulliford (1992); and Meighan and Zimmerman (1994). If you cite from any source, you should include an extra page listing your bibliography. The review should be submitted electronically and counts 10% of the final grade.
Exams
There will be two exams (first exam worth 25% of the final grade, and second exam worth 35% of the final grade). Each examination involves identifying complete and partial human bones and applying forensic techniques to specific bone stations. The exams are accumulative in order to reinforce your knowledge of skeletal anatomy.

Team Project
The analysis of commingled remains will be presented as group reports. On August 1st each group will submit a draft of the final paper for revision. The draft will be returned on August 5th. The final version of the paper is due on August 9th no later than 5 pm. Papers should be 5-6 pages of text, including a spreadsheet with the raw data and the bibliography. Photographs, illustrations and diagrams are also encouraged. The report should be submitted in both printed and electronic formats. The report contributes 30% of the final grade. No papers will be accepted after the submission deadline. Papers should follow the stylistic and formatting guidelines of the SSA (Society for American Archaeology). These guidelines can be accessed at http://www.saa.org/StyleGuideText/tabid/985/Default.aspx
The grading of the papers will be based on their content, the logic of the argumentation, the relationship between stated hypotheses and data used to test them, the clarity of the writing, and the adherence to the stylistic guidelines.

Summary of evaluation weighting
First exam 25%
Second exam 35%
Video review 10%
Team project 30%

Use of laptops and tablets
Students are welcome to use a laptop computer or a tablet in class provided it is used for taking notes, for web searches specifically related to the topic being discussed, or for collecting the data for the team project. If a student is found using the laptop or other devise for purposes unrelated to the class, his/her right to use it will be immediately suspended for the rest of the summer session. The use of phones is not permitted.

Academic Integrity
You are expected to be familiar with and to follow the University’s policies on academic integrity (see http://www.brandeis.edu/studentlife/sdc/ai ). Faculty will refer any suspected instances of alleged dishonesty to the Office of Student Development and Conduct. Instances of academic dishonesty may result in sanctions including but not limited to failure in the course, failure on the assignment in question, suspension from the University and/or educational programs.
Readings (on LATTE)

Jones, D G and R Harris  
Current Anthropology 39(2):253-264

Meighan, Clement W / Gulliford, Andrew  
1992  Another View on Repatriation: Lost to the Public, Lost to History/ Reply to “Another View on Repatriation”.  

Meighan, Clement W / Zimmerman, Larry  
1994  Burying American Archaeology/ Sharing Control of the Past.  
Archaeology, November/December, pp.64-68.

Ortner, Donald, J.  
In Disease and Demography in the Americas, pp. 5-14.  
Verano, John, and Douglas Ubelaker, editors. Smithsonian Institution Press, Washington DC.

Ortner, Donald, J. and Walter G.J. Putshar  
Smithsonian Institution Press, Washington.

Owsley, Douglas W., and Richard L. Jantz  

Schwartz, Jeffrey, H.  
2007  Skeleton Keys: An Introduction to Human Skeletal Morphology, Development, and Analysis.  

Ubelaker, Douglas, H.  
Manuals on Archaeology 2.  Taraxacum, Washington.

Verano, John, and Douglas Ubelaker  
1991  Health and Disease in the Pre-Columbian World.  
In Seeds of Change, pp. 209-224.  
Herman Viola and Carolyn Margolis, editors. Smithsonian Institution Press, Washington DC.

Wells, C.  
1967  Pseudopathology.  
In Diseases in antiquity, edited by Brothwell and Sandison, pp. 5-19.  
Charles C. Thomas, Springfield IL.
Wood, J. et al

**Suggested bibliography for team project**

Gejvall, Nils-Gustaf

Shipman, P., G. Foster, and M.J. Schoeninger

Williams, Howard

http://mcu.sagepub.com/resources.library.brandeis.edu/cgi/reprint/9/3/263