Course Description

Bioarchaeology is the study of human skeletons from archaeological sites. Human skeletal and dental remains provide an important source of information on the study of human variation and the state of the human condition and human behavior in the past. This course will focus on the bioarchaeology of the Pacific-Asian region, including Polynesia, Micronesia, Melanesia, Australia, Southeast Asia, and East Asia. Among the topics to be explored are musculo-skeletal indicators, paleodemography, paleopathology, dental anthropology, indicators of biological stress, trauma and violence, infectious diseases, biodistance studies, isotopic analysis of diet and nutrition, and bimolecular genetic studies. This course qualifies as Writing Intensive (WI).

Prerequisites: Anth 215, 215L; Anth 384, 384L; or consent of instructor.

Student Learning Outcomes

1. Become familiar with general field of bioarchaeology.
2. Specific methods used in bioarchaeology, paleopathology, and related fields.
3. Review of previous work in bioarchaeology of the Pacific-Asian region.

Required Text:

Optional Texts:


Other Readings:
Other assigned readings for this course will be made available throughout the semester as PDF files.

Course Requirements and Grade Distribution:

1. Class Participation and Weekly Written Assignments (30 pts.)

The typical format of this course will consist of short lectures and discussions based on the readings. You should keep up with the readings so that you will be prepared to participate in and contribute to class discussions. Attendance is extremely important. Each member of the seminar is expected to read ALL of the assigned readings. To facilitate the oral discussion of these, each student will prepare a written summary of the specific articles (@ 2 pts) assigned to them each week. The written summaries will serve as the basis for discussing the assigned readings. Written summaries (one half to one page in length) should be distributed to the other members of the seminar on the day of the seminar and/or sent at an attachment to all members of the seminar group.

* Note: This course syllabus is subject to change, as needed.

This important assignment serves as a pre-requisite for annotated bibliography and research paper assignments in this course. Consultation with the instructor early in the semester is an important part of this assignment. Do not wait until the last minute. The proposal will include:

1. Title (descriptive, interesting, and creative)
2. Description of your research topic (see some suggested topics below), research question(s) that you will address, significance of topic to this course, evidence that a sufficient literature exists for your study, why this topic interests you, an outline of your proposed research paper, and a list of the sources that you have been able to find thus far.

**Due date: February 10**

**Topics in Bioarchaeology**

<table>
<thead>
<tr>
<th>Stature &amp; growth studies</th>
<th>Linear enamel hypoplasia (LEH)</th>
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<tbody>
<tr>
<td>Porotic hyperostosis and anemia</td>
<td>Infectious disease</td>
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<td>Treponemal diseases</td>
<td>Malaria</td>
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<td>Hansen’s disease (leprosy)</td>
<td>Trauma</td>
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<td>Osteoarthritis-DJD</td>
<td>Dental pathology</td>
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<td>Dental pathology</td>
<td>Isotope analysis: paleodiet</td>
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<td>Trace element analysis</td>
<td>Paleodemography</td>
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<td>Mortuary analysis</td>
<td>Musculo-skeletal markers (MSM)</td>
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<td>Lapita skeletons</td>
<td>The ‘repatriation’ issue</td>
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<td>Dwarfism in the Pacific</td>
<td>Polynesian phenotypes</td>
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<td>Bioarchaeology of children</td>
<td>Nonmetric trait variation</td>
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<td>Dental anthropology</td>
<td>Craniodentometric studies</td>
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<td>Molecular genetic studies</td>
<td>Dental configuration</td>
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<td>Rocker jaw</td>
<td>Dental modification</td>
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<td>Cranial deformation</td>
<td>Cannibalism</td>
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3. Annotated Bibliography Assignment (20pts.)

Prepare an annotated bibliography for at least 8-10 key articles (e.g., journal articles and chapters in books) that pertain to the topic you have selected. In addition to the individual annotations for each article, write a **1 page (250 words max.) general review** that includes what you found in the literature and how this relates to your proposed research paper. Consult the guidelines on how to prepare an annotated bibliography.

**Due Date: March 17**

4. Research Paper Assignment (40 pts.).

A research paper (10-12 double-spaced pages + references, figures, etc.) on a topic relevant to the bioarchaeology of Pacific-Asia is required. Refer to the distributed guidelines on research paper writing and referencing styles. Include a full bibliography. Graduate students will be expected to produce longer (15-20 pages + supplemental material) research papers.

**Due Date: May 5**
Grading

Grades will be assigned using the following scale:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>97-100</td>
<td>A+</td>
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<tr>
<td>94-96</td>
<td>A</td>
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<tr>
<td>90-93</td>
<td>A-</td>
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<td>87-89</td>
<td>B+</td>
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<tr>
<td>84-86</td>
<td>B</td>
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<tr>
<td>80-83</td>
<td>B-</td>
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<td>77-79</td>
<td>C+</td>
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<td>74-76</td>
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<td>0-59</td>
<td>F</td>
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Consultation:

Please feel free to come to see me with any questions or concerns you have regarding the course material, your progress, grades, requirements, etc. E-mail is a good way to reach me if you have brief questions. There are several resources on campus designed to enhance your learning and campus experience. For those needing help with classes, research, study techniques, etc., you may wish to visit the Student Success Center at Sinclair Library (http://gohere.manoa.hawaii.edu/).

Academic Integrity:

See the University of Hawaii-Manoa policies on academic integrity at: http://www.catalog.hawaii.edu/about-uh/campus-policies1.htm

Schedule of Lectures and Readings

The readings (not from the assigned texts) will be sent via email at least one week in advance.

Week 1 (Jan 13): Introduction: organization; geography and prehistory of Pacific-Asia


January 20: Holiday: Martin Luther King, Jr. Day

Week 2 (Jan 27): Bioarchaeology, paleopathology, osteological paradox


**Week 3 (Feb 3): Paleodemography, sudadult growth, adult stature**


**Week 4 (Feb 10) Dental pathology and LEH**

Larsen (1997) Ch. 3:64-82.


**February 17: Holiday: President’s Day**
**Week 5 (Feb 24) Porotic hyperostosis, cribra, and infectious disease**


**Week 6 (Mar 3) Osteoarthritis, trauma and MSM, biomechanical analysis**

Larsen (1997) Ch. 4-6.


**Week 7 (Mar 10) Biological relatedness, biodistance**
Larsen (1997) Ch. 9.


**Week 8 (Mar 17) Chemical analyses: isotope and DNA analyses**


**SPRING BREAK: MARCH 21-25**

**Week 9 (Mar 31) Bioarchaeology in Southeast Asia**


**Week 10 (Apr 7) Bioarchaeology in East Asia**


**Week 11 (Apr 14) Bioarchaeology: Papua New Guinea, Solomon Is. and Vanuatu**


**Week 12 (Apr 21) Bioarchaeology of Mariana Islands & Western Pacific**


**Week 13 (Apr 28) Bioarchaeology: Fiji and Western Polynesia**


**Week 14 (May 5) Bioarchaeology: Hawaii, New Zealand Rapa Nui, Eastern Polynesia**


May 16 **Final Exam 7:30-9:30 AM**