This course focuses on the biological/physical anthropology of the Pacific and surrounding regions. In addition to examining the biological diversity of Pacific peoples, past and present, this course provides background on evolutionary biology, human ecology, and human adaptability. After reviewing the geography, prehistory, and languages of the Pacific, the course examines several broad themes in Pacific biological anthropological research. The topics that will be explored in this course include: early paradigms; human ecology/adaptability and the “cold adaptation hypothesis”; Polynesian phenotype; evidence for the initial peopling of the Pacific: dental, skeletal and genetic evidence; Lapita skeletal record; ancient DNA; early inhabitants of Australia and Indonesia; health and disease; migration and modernization in the Pacific. More specialized topics will include malaria, kuru in New Guinea, ALS-PD in the Mariana Is, etc.

This is a writing-intensive course with **Focus Designation-W**, which also fulfills the **Biological Science (DB) Diversification Requirement** at UHM. **Pre-requisite:** Anth 215, or consent of Instructor.

**Readings:** A syllabus (list of readings) will be distributed at the beginning of the course and posted on the web site for this course at:
http://www.anthropology.hawaii.edu/People/Faculty/Pietrusewsky/anth455/

PDF files of all readings will be available throughout the semester.

**Other texts:** Although there are no assigned texts for this course, several books provide context for the course:


It is expected that everyone has read all the assigned reading prior to attending the lectures.

**Weekly Written Assignments and Discussion (20 pts.)**

The normal format of this course will consist of lectures and discussions based on the assigned readings. Each student is encouraged to read ALL of the assigned readings and be prepared to participate in class discussions. To facilitate these discussions, each student will prepare a written summary (one-half to one page in length) of a specific article assigned to them each week. The structure and content of these summaries should follow the Annotated Bibliography Assignment. All written summaries should be sent to the Instructor prior to the day the reading is assigned. Each summary will be worth 1 pt.

**Map Quiz**
Value: 5%
Date: **February 11, 2015**
To facilitate the learning of the geography (including the names of the major island groups) students should obtain a copy of a relatively new edition of a map of the Pacific similar to the one published by the Hawaii Geographic Society. [Usually available at the UH Bookstore] A short quiz that will test your knowledge of the geography of the Pacific will be given during class time. Smaller (8.5 X 11) versions of these maps will be distributed during class.

**Mid-Term Exam:**
- Value: 20%
- Due Date: March 4, 2015
  The mid-term will cover readings and lecture material presented in approximately the first half of the course. The format will be a mixture of short definition and short essay questions. A study guide will be issued prior to this exam.

**Assignment One: Annotated Bibliography**
- Value: 10%
- Due Date: March 11, 2015
  After consulting with the instructor, students will develop an annotated bibliography on a research topic that is relevant to the biological anthropology of the Pacific. A list of possible topics will be distributed early in the course. A minimum of 8-10 references (journal articles, book chapters, books etc.) is required for this assignment; the works selected should include both important theoretical works as well as case studies. Provide comments and notes on how each work listed in the bibliography pertains to your topic and the reason for its selection. In addition to the individual annotations (250-300 words each), a 1-2 page (500 words max.) general review that includes what you found in the literature and how this relates to your chosen topic must be included. Consult the guidelines on referencing styles and how to prepare an annotated bibliography that will be distributed.

**Assignment Two: Research Paper**
- Value: 25%
- Word limit: 2500 [5000 words for graduate students]
- Due date: April 29, 2015
  The research paper will be based on the annotated bibliography assignment (the grade you receive will reflect this). The research paper will be an extension of what you learned in reviewing the literature pertinent to your chosen topic in physical/biological anthropology in the Pacific. Begin your research paper with a general question or set of related questions that you want to address. Refer to the distributed guidelines on research paper writing and referencing styles and be consistent in your use of these guidelines. Include a full bibliography.

**Final Exam**
- Value: 20%
- Due date: May 11, 2015 [12-2 PM]
  The final written exam will cover readings and lecture material since the mid-term exam. The format will be a mixture of short definition and short essay questions. A study guide will be issued prior to this exam.

**Final Grade for Course:** Weekly writing assignments, attendance, & discussion (20%); Map quiz (5%); Annotated bibliography (10%); Mid-term (20%); Research paper (25%); and Final exam (20%).
Reading Assignments: Spring 2015

Jan 14. Introduction and organization, Pietrusewsky’s research in Pacific

Jan. 21. The Pacific World: geography, geology, European explorers, colonialism, and challenges


Jan. 28. Peopling of the Pacific: prehistory, language, and models


Feb. 4. Pacific peoples: race concept, studies of human variation/biology, Polynesian phenotype


Feb. 11. Principles of human ecology, human adaptability, Houghton’s cold adaptation hypothesis

[Map Quiz]


Feb 18  **Craniology: metric and nonmetric variation, biodistance studies.**


Feb. 25  **Peopling of the Pacific: dental studies**


Mar. 4.  **Mid-term Exam**

Mar 11.  **Microevolution, small islands, and genetic evidence for peopling of the Pacific**


Mar. 18. Australia and Tasmania and Homo floresiensis


Henneberg, M., Eckhardt, R., Chavanaves, S., & Hsu, K. 2014. Evolved developmental homeostasis disturbed in LB1 from Flores, Indonesia, denotes Down syndrome and not diagnostic traits of the invalid species Homo floresiensis. Proceedings of the National Academy of Sciences. 111 (33), 11967-11972


March 23-27: Spring Recess

Apr. 1. Lapita skeletons and Polynesian ancestors, aDNA


Apr 8. Commensal species, Polynesians in America

Matisoo-Smith E. 2009. The commensal model for human settlement of the Pacific 10 years on: what can we say and where to now? Journal of Coastal and Island Archaeology, Special Issue 4:151-163


**Apr. 15. Prehistoric health and disease in the Pacific**


**Apr 22 Post-contact health and disease in the Pacific: migration and modernization studies**


**Apr. 29. Malaria, Kuru and ALS-PD in the Mariana Islands**


May 6 Review [Research papers are due]

May 11. Exam period [12-2 PM]
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
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</thead>
<tbody>
<tr>
<td>Jan. 14.</td>
<td>Introduction; organization; instructor’s Pacific research</td>
<td>Kirch (2000: Ch. 2); Howells (1973:Ch. 2); Chappel (1999) &amp; Map</td>
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<td>Jan. 28</td>
<td>Peopling of the Pacific: prehistory, languages, and linguistic models</td>
<td>Houghton (1996:Ch. 2); Howells (1979); Mielke et al. (2011); Pietrusewsky (2012)</td>
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<td>Feb. 4</td>
<td>Pacific peoples; race concept, studies of human variation/biology</td>
<td>Kormondy &amp; (1998:Ch. 7); Bindon (2004); Bindon &amp; Baker (1997); Houghton (1990); van Dijk (1991)</td>
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<td>Feb. 18</td>
<td>Craniology: metric and non-metric; biodistance studies</td>
<td>brace &amp; Hinton (1981); Hanihara (1993); Nelson &amp; Fitzpatrick (2013); Turner (1990)</td>
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<td>Feb. 25</td>
<td>Dental studies: morphology: dental pathology</td>
<td>Chambers (2013); Giles (1973); Relethford (2010); Friedlaender et al. (2008); Matisoo-Smith (2102); Soares et al. (2010)</td>
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<td>Mar. 4</td>
<td>Mid-term exam</td>
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<tr>
<td>Mar. 11</td>
<td>Microevolution: genetic evidence for peopling of Pacific Assignment # 1 due</td>
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<tr>
<td>Mar 18</td>
<td>Australia, Tasmania, Homo floresiensis</td>
<td>Aiello (2010); Brown (1997); Henneberg et al (2014); Pugach et al. (2013)</td>
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<td>SPRING RECESS Mar 23-27</td>
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<tr>
<td>Apr. 1</td>
<td>Lapita skeletons: Polynesian ancestors</td>
<td>Buckley et al. (2008); Katayama et al. (2007); Pietrusewsky et al. (2014); Matisoo-Smith (2015)</td>
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<tr>
<td>Apr. 8</td>
<td>aDNA, &amp; commensal species, Polynesians in America</td>
<td>Malaspinas et al. (2014); Matisoo-Smith (2009); Matisoo-Smith &amp; Ramirez (2010); Thorsby (2012)</td>
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<tr>
<td>Apr. 22</td>
<td>Health &amp; disease in the Pacific: contemporary, post-contact, modernization studies</td>
<td>Bindon (1995); Keighley et al. (2007); Neel (1962); Ulijaszek &amp; Ohtsuka (2007)</td>
</tr>
<tr>
<td>Apr. 29</td>
<td>Malaria, Kuru, ALS-PD Assignment # 2 due</td>
<td>Gadjusek (1977); Lindenbaum (2008); Plato et al. (2003); Garruto et al. (2003); Lum (2007)</td>
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<td>May 6</td>
<td>Review</td>
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<tr>
<td>May 11</td>
<td>Final exam 12-2 PM</td>
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