



## ANTH 444/544: The Seacoast in Prehistory (Island & Coastal Archaeology)

Instructors: Jon Erlandson and Amira Ainis  
 E-mail: [jerland@uoregon.edu](mailto:jerland@uoregon.edu), [aainis@uoregon.edu](mailto:aainis@uoregon.edu)  
 Days/Room: M & W 4:00-5:20 PM, McKenzie 214?  
 Office Hours: Bldg 112; M&W 1-2 PM (JE)/ M&W 3-4 PM (AA)

### COURSE DESCRIPTION

Once considered marginal environments, it is now clear that islands and coastlines played an important role in the biological and cultural development of humans. Archaeological research demonstrates that the wealth of resources available in coastal areas often supported dense human populations and facilitated geographic dispersals, seafaring, advances in cultural complexity, and other socio-technological innovations. Using case studies from around the world, we will examine coastlines from a variety of theoretical and methodological perspectives. Topics explored will include: human evolution, adaptations, and dispersals; seafaring, subsistence strategies, and exchange systems; sea level fluctuations and submerged landscapes; and human impacts on ancient ecosystems. Focusing on recent research in coastal areas, we will examine the pivotal role aquatic ecosystems played in the deep history of humans and hominins, as well as how archaeology illuminates our understanding of ancient island and coastal societies.

### COURSE REQUIREMENTS

<u>Undergraduates</u>	<u>Points</u>	<u>%</u>
Attendance	20 (1 per class)	10
Participation	20 (1 per class)	10
Article Critique	20	10
Article Comparison Assignment	20	10
Shell Midden Assignment	20	10
Research Paper	100	40
	<b>200 total points</b>	<b>100%</b>

<u>Graduates</u>	<u>Points</u>	<u>%</u>
Attendance	25	10
Overall Participation	25	10
Article Comparison Assignment	50	20
Annotated Bibliography	50	20
Research Paper	100	40
	<b>250 total points</b>	<b>100%</b>

### Grading Policy

The correlation between points and letter grades is:

A+	97-100	B+	87-89	C+	77-79	D+	67-69	F	59 and below
A	93-96	B	83-86	C	73-76	D	63-66		
A-	90-92	B-	80-82	C-	70-72	D-	60-62		

### **Expected levels of performance:**

A+: Performance significantly exceeds all requirements and expectations required for an A grade. Few, if any, students receive this grade.

A: Performance is outstanding relative to that required to meet course requirements; demonstrates mastery of course content at the highest level.

B: Performance is significantly above that required to meet course requirements; demonstrates mastery of course content at a high level.

C: Performance meets all course requirements; demonstrates adequate understanding of course content.

D: Performance is at a minimal level necessary to pass the course, but does not fully meet course requirements; demonstrates a marginal understanding of course content.

F: Quality of performance in the course is unacceptable and does not meet requirements; with inadequate understanding of course content.

**Weekly readings** – As a dual level course with both undergraduate and graduates, the course's success depends on the participation of all students enrolled, with graduate students expected to play leadership roles. Discussion is based on knowledge from assigned reading materials. **You are responsible for reading the assigned articles before class each week.** Links to the readings will be posted on Canvas and/or emailed.

Apart from lecture, the major activities of the class will include reading, discussion of the readings, article critiques, assignments, and final research papers. **Assigned readings should be completed before class begins.** In a typical week, we will have lecture during the first class meeting, with more of a seminar-style discussion of the readings and lecture material during the second day.

### **ASSIGNMENTS**

**Article Critiques** – In addition to assigned readings, you are required to read and critique two (2) peer reviewed journal articles relating to class topics. One of these articles must be from outside the class reading list, the other one involves a comparative critique of two assigned articles (Raymond vs. Quilter & Stocker). For these assignments you should provide a summary of the paper's content and assess its scholarly merit. For example, did the author/s answer the questions they set out to address? Were the methods and/or theoretical perspectives truly applicable to the study at hand? Was enough background information given to contextualize the research? The first article critique should be 1.5-2 page (typed, single-spaced) summaries and critiques of an article of your choice. If you are unsure if a particular article is applicable, please ask. For the second assignment summarize the arguments presented by Raymond (1981) and Quilter and Stocker (1983), then compare and contrast the theories, perspectives, and evidence they present. Form your own opinion and interpretation based on the given data – there is no “right” or “wrong” answer, argue your point clearly and well and back it up with data. This assignment should be 2-3 pages long (typed, single-spaced) not counting references.

#### **Shell Midden Assignment - Deciphering a Shell Midden: Ecological and Cultural Changes at Daisy Cave.**

For this assignment, you will review a set of real data to examine the effects that natural and cultural processes have had on an archaeological site. Data tables, stratigraphic profiles, and radiocarbon (<sup>14</sup>C) dates will be posted on Canvas for you to access.

**Graduate Students Only** – Graduate students are also required to meet weekly with the senior instructor and will be expected to do additional readings assigned during these meetings. Graduate students are also required to submit an

Annotated Bibliography of all the articles/chapters assigned for this class. They may turn this in at the end of the term.

**Final Research Paper** – a research paper on a relevant subject of your choice will comprise 40 percent of your grade. The topic must be pre-approved by sending us an email along with a selection of 3-5 suitable references you believe will be useful. See last page of syllabus for information related to the paper.

## **POLICY ISSUES**

### **Missed Assignments/Quizzes etc...**

There will be no makeup of missed exams and assignments except as defined by official UO policy on excused absences. Anticipated absences must be cleared with the instructor before missing class. Emergency absences consist of illness, injury, or serious illness or death in the family. Late Assignments (anything turned in after the assigned due date without pre-approved permission) will be graded for 75% credit if turned in up to one week late, and 50% credit if turned in beyond one week late.

### **Cheating and Academic Dishonesty**

Assignments in this class are intended to assess your individual knowledge and understanding of the subject material addressed in this class. Therefore, cheating or plagiarism in any form will not be tolerated. The work you present must be your own. Individuals involved in an act of academic dishonesty will be forwarded to the Office of Student Conduct and if circumstances warrant, fail the course. If you have any questions about what constitutes academic integrity, please see the Code of Student Conduct at: [uodos.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode/tabid/69/Default.aspx](http://uodos.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode/tabid/69/Default.aspx)

### **Incompletes**

In this course, an incomplete grade will be used in accordance with the official university grading policy, which can be found at [http://registrar.uoregon.edu/incomplete\\_policy](http://registrar.uoregon.edu/incomplete_policy)

### **Open Learning Environment**

The intention and structure of university level courses are to provide open, thoughtful forums for a wide variety of topics. The UO actively promotes the right of all individuals to equal opportunity in education and employment without regard to race, color, sex, national origin, age, religion, marital status, disability, veteran status, sexual orientation, gender identity, gender expression, or any other consideration not directly and substantively related to effective performance. This policy implements all applicable federal, state, and local laws, regulations, and executive orders, as outlined in the handbook on the Office of Affirmative Action and Equal Opportunity.

<http://aaeo.uoregon.edu/AAEO%20Booklet%20Color.pdf>

### **Accessible Education**

The UO is dedicated to the principles of equal opportunity in education and accepts diversity as an affirmation of individual identity within a welcoming community. Disability is recognized as an aspect of diversity integral to the university and to society. Please see the following link for more information: <http://aec.uoregon.edu/>

### **University Career Center**

The UO Career Center, part of the Division of Student Affairs, provides career and job search services and resources to UO students and alumni. They can help you develop long-term career goals and strategies, facilitate self-exploration and discovery, connect with potential employers, and empower and challenge you to fulfill your potential. They will serve as your advocate as you pursue an inspired and fulfilling future. The Career Center has offices in Hendricks Hall on the UO campus and in the White Stag Block in Portland. Please see the following link for more information:

<http://career.uoregon.edu/>

## COURSE OUTLINE

### Week 1: Introduction: Coastal Environments and Archaeology (9/25 & 27)

Sauer 1962. Seashore—Primitive Home of Man? *Proceedings of the American Philosophical Society* 106:41-47.

Osborn 1977. Strandloopers, Mermaids, and other Fairy Tales. In *For Theory Building in Archaeology*, edited by L. Binford. Academic Press, London, pp. 157-205.

Yesner 1980. Maritime Hunter-Gatherers: Ecology and Prehistory. *Current Anthropology* 21:727-750.

Erlandson 2001. The Archaeology of Aquatic Adaptations: Paradigms for a New Millennium *Journal of Archaeological Research* 9:287-350.

### Week 2: Aquatic Productivity: Gardens of Eden or Gates of Hell? (10/2 & 4)

Bailey 1975. The Role of Molluscs in Coastal Economies: The Results of Midden Analysis in Australia. *Journal of Archaeological Science* 2:45-62.

Moss 1993. Shellfish, Gender, and Status on the Northwest Coast: Reconciling Archeological, Ethnographic, and Ethnohistorical Records of the Tlingit. *American Anthropologist* 95:631-652.

Ainis et al. 2017. The Potential Use of Seaweeds and Marine Plants by Native Peoples of Alta and Baja California: Implications for "Marginal" Island Ecosystems. In *Coping with Abundance: Re-examining the Marginality of the California Islands*. University Press of Florida.

### Week 3: Human Origins and Aquatic Resources (10/9 & 11)

Parkington 2001. Milestones: The Impact of the Systematic Exploitation of Marine Foods in Human Evolution. In *Humanity from African Naissance to Coming Millennia*, pp. 1000-1010.

Marean et al. 2007. Early Human Use of Marine Resources and Pigment in South Africa during the Middle Pleistocene. *Nature* 449:905-908.

Cortes-Sanchez et al. 2011. Earliest Known Use of Marine Resources by Neanderthals *PLoS One* 6:1-15.

Jerardino 2016. On the Origins and Significance of Pleistocene Coastal Resource Use in Southern Africa with Particular Reference to Shellfish Gathering. *Journal of Anthropological Archaeology* 41:213-230.

### **1<sup>st</sup> Article Critique due (10/11)**

### Week 4: Africa to Asia: The Southern Dispersal Route/Mangrove Highway Hypothesis (10/16 & 18)

Stringer 2000. Coasting Out of Africa. *Nature* 405:24-26.

Bailey et al. 2007. Coastlines, Submerged Landscapes, and Human Evolution: The Red Sea Basin and the Farasan Islands. *Journal of Island & Coastal Archaeology* 2:127-160.

Bulbeck 2007. Where River Meets the Sea: A Parsimonious Model for *Homo sapiens* Colonization of the Indian Ocean Rim and Sahul. *Current Anthropology* 48(2):315-321.

Erlandson & Braje. 2015. Coasting Out of Africa: The Potential of Mangrove Forests and Marine Habitats to Facilitate Human Coastal Expansion via the Southern Dispersal Route. *Quaternary International*.

**Week 5: Sunda to Sahul: Island Southeast Asia and Australia (10/23 & 25)**

Wickler & Spriggs 1988. Pleistocene Human Occupation of the Solomon Islands, Melanesia. *Antiquity* 62:703-706.

O'Connell & Allen 2007. Pre-LGM Sahul (Pleistocene Australia-New Guinea) and the Archaeology of Early Modern Humans. In *Rethinking the Human Revolution*, pp. 395-410.

O'Connor et al. 2011. Pelagic Fishing on East Timor 42,000 years ago. *Science* 334: 1117-1121.

McNiven. 2003. Saltwater People: Spiritscapes, Maritime Rituals, and the Archaeology of Australian Indigenous Landscapes. *World Archaeology* 35(3):329-349.

**Week 6: Brave New Worlds: Seafaring and the Peopling of the Americas (10/30 & 11/1)**

Dillehay et al. 2007. Monte Verde: Seaweed, Food, Medicine, and the Peopling of South America. *Science* 320:784-786.

Erlandson et al. 2007. The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas. *Journal of Island & Coastal Archaeology* 2:161-174.

Erlandson et al. 2011. Paleoindian Seafaring, Maritime Technologies, and Coastal Foraging on California's Channel Islands. *Science* 441:1181-1185.

Raymond. 1981. The Maritime Foundations of Andean Civilization: A Reconsideration of the Evidence. *American Antiquity* 46(4):806-821.

Quilter & Stocker 1983. Subsistence Economies and the Origins of Andean Complex Societies. *American Anthropologist* 85:545-562.

**Assigned Comparison: Raymond vs. Quilter & Stocker Articles due (11/1)**

**Week 7: The Caribbean (11/6 & 8)**

Fitzpatrick. 2015. The Pre-Columbian Caribbean: Colonization, Population Dispersal, and Island Adaptations. *PaleoAmerica* 1(4):305-331.

Fitzpatrick & Keegan. 2007. Human Impacts and Adaptations in the Caribbean Islands: An Historical Ecology Approach. *Earth & Environmental Science: Transactions of the Royal Society of Edinburgh* 98:29-45.

Wing. 2001. The Sustainability of Resources Used by Native Americans on Four Caribbean Islands. *International Journal of Osteoarchaeology* 11:14-23.

**Week 8: Peopling the Remote Pacific (11/13 & 15)**

Kirch. 2010. Peopling of the Pacific: A Holistic Anthropological Perspective. *Annual Review of Anthropology* 39:131-148.

Anderson. 2001. No Meat on that Beautiful Shore: The Prehistoric Abandonment of Subtropical

Polynesian Islands. *International Journal of Osteoarchaeology* 11:14-23.

Carson & Kurashina 2012. Re-envisioning Long-distance Oceanic Migration: Early Dates in the Mariana Islands. *World Archaeology* 44(3):409-435.

**Shell Midden Assignment due (11/15)**

**Week 9: Archaeology & Historical Ecology: Human Impacts on Ancient Islands (11/20 & 22)**

Kirch. 2005. Archaeology and Global Change: The Holocene Record. *Annual Reviews in Environmental Resources* 30:409-440.

Erlandson & Rick. 2010. Archaeology Meets Marine Ecology: The Antiquity of Maritime Cultures and Human Impacts on Marine Fisheries and Ecosystems. *Annual Review of Marine Science* 2:165-185.

Erlandson. 2013. Shell Middens and other Anthropogenic Soils as Global Stratigraphic Signatures for the Anthropocene. *Anthropocene* 4:24-32.

Braje et al. 2017. Archaeology, Historical Ecology, and the Construction of Anthropogenic Island Ecosystems. *Environmental Conservation* (in press).

**Week 10: Linking the Past, Present, and Future (11/27 & 29)**

Pauly 1995. The Shifting Baselines Syndrome. *Trends in Ecology & Evolution* 10:430.

Jackson et al. 2001. Historical Overfishing and the Recent Collapse of Coastal Ecosystems. *Science* 93:629-638.

Erlandson 2012. As the World Warms: Rising Seas, Coastal Archaeology, and the Erosion of Maritime History. *Journal of Coastal Conservation* 16:137-142.

Fitzpatrick et al. 2015. Recent Progress, Trends, and Developments in Island and Coastal Archaeology. *Journal of Island & Coastal Archaeology* 10:1-25.

**Final Research Papers due (last day of class)**

**Final Exam:**

## RESEARCH PAPER GUIDELINES

A major requirement for this class is to research a specific topic approved by your instructor. The requirements for this project are listed below:

- I. Write a paper on a specified topic. The paper should be 12-15 pages for undergraduates and 15-18 pages for graduate students, typed, double-spaced, with 1" margins on all sides, in Times New Roman 12 pt font.
- II. Generally organize your paper into the following sections:
  - a. Introduction - What is your topic? Why is it interesting? What is the relevance of your topic to understanding seacoasts in prehistory?
  - b. Background - What does your research focus on? What kind of work has been done previously?
  - c. Body of Paper - Explain the significance of the research. Discuss the evidence.
  - d. Discussion - Why is this research important? What are the implications for research within and outside of anthropology/archaeology?
  - e. Conclusions - Reiterate why this topic is interesting and relevant. Summarize your findings.
  - f. References Cited - list all of your references – be consistent in how you format them! (Note: there is no required bibliographic formatting style).
- III. You must include at least 10 references for your paper. Three of these can be from readings in class. References must be from reputable sources (i.e., peer reviewed journals and books) – No Internet sources or public/mass media sources are acceptable (e.g., National Geographic, newspaper, web pages).
- IV. You must include at least three figures. One of these should be a map that shows the location(s) of your research area. Other figures might include an illustration or photograph of an artifact, archaeological site, or additional maps.

