

ANAR/SIO 164 Intro to Marine Archaeology
Winter 2019
Prof. Isabel C. Rivera-Collazo
Tuesday and Thursday 3:30 pm – 4:50 am
Eckart 227

Office Hours: Monday 1-2pm SvH1147, or by appointment iriveracollazo@ucsd.edu
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Office Hours: Wednesdays 11am, Social Sciences Building (SSB) 283

Course description:

Maritime archaeology provides unique access to ancient environmental and cultural data concerning human adaptation to climate and environmental change. This course presents an overview of the methods, theories and practice of marine archaeology today. Topics include - environmental characteristics of coastal and underwater settings; the nature of ports, navigation, maritime culture, submerged landscapes, shipbuilding; the methods of research in underwater settings; and legislative issues regarding underwater and coastal heritage.

Course textbook:

- Bowens, Amanda (editor). 2009. *Underwater Archaeology: the NAS Guide to Principles and Practice*. Second Edition. Chichester: Blackwell Publishing.

Other recommended books:

- Catsambis, Alexis, Ben Ford, and Donny L. Hamilton, eds. 2011. *The Oxford Handbook of Maritime Archaeology*. Oxford, UK: Oxford University Press.
- Green, Jeremy. 2004. *Maritime Archaeology, a Technical Handbook*. Second Edition. Elsevier Academic Press.
- Gould, Richard. 2011. *Archaeology and the Social History of Ships*. Second Edition. Cambridge University Press
- Ruppé, Carol and Janet Barstad. 2002. *International Handbook of Underwater Archaeology*. Kluwer Academic / Plenum Publishers.

Objectives:

The student will:

- 1) Recognize site formation processes
- 2) Explain how the marine/aquatic settings affect the archaeological record.
- 3) Contrast land, marine, underwater and nautical archaeology
- 4) Recognize how 'maritime culture' affects marine and coastal patterns of material culture.
- 5) Practice cognitive mapping, and search, survey and documentation of a hypothetical archaeological context.
- 6) Judge over real-life archaeology case study using ethical principles
- 7) Compose a poster and share their knowledge with the general community
- 8) Value the relevance of marine archaeology to modern society

Expectations:

This course will be dictated as lectures. The students will be expected to attend to class, do all assigned readings, and participate actively.

Assignments

Grading will be based on the student's performance on the following assignments.

1. Attendance (100 points)
Attendance is one full mark towards the final grade. Points will be deducted for late arrival to class unless excused (see below – attendance and deadlines)
2. In class assignments (200) (no Mid-Term):
 - a. Field notebook (50pts)
 - b. Poster Topic Essay (50 pts)
 - c. Poster (75 pts)
 - d. Ethics written assessment (25 pts)
2. Final Exam (100 points)

Poster Session

It is our ethical responsibility to communicate our knowledge with the general public. As assignment for the class, students will work in groups to prepare posters to share knowledge about Marine Archaeology with the SIO community, showcasing them on the last day of class. I will share the rubrics for assessment during the quarter. Students can select from these suggested topics, or could discuss alternative topics with the professor.

As group work, the poster will weight 75 points. To supplement this grade, students will also prepare an individual short essay on the Poster Topic (worth 50 points).

Suggested poster topics

Underwater Archaeology in California	History of Underwater Archaeology
Methods in Underwater Archaeology	Vasa and Mary Rose shipwrecks
Underwater Archaeology in Latin America	Ancient shipbuilding
International Legislation	Doggerland
Conservation of Archaeological Objects	Ulu Burun
Ethics in Underwater Archaeology	Santa Rosae Landscapes
Portis Project - Rome	Tantura Lagoon
Port of Alexandria	Paleolandscapes of the Americas
Slave Wrecks Project	Tel Dor, Israel

Policies

Total course grading

The final grading for this course will be measured out of a total of 400 points, divided in the following manner:

<u>Assignment</u>	<u>Points</u>
Attendance	100
In-class assignments	200
Final Exam	100
TOTAL POINTS	400

Extra credit (2 point each):

- Visit to the Maritime Museum of San Diego
- Half-page written response to a marine archaeology article (specific deadlines will be announced. Up to 5 responses per quarter).
- Attendance to guest lectures outside class time (to be announced during the quarter)

Grading scale

>100 = A+	77-79 = C+
94-99 = A	74-76 = C
90-93 = A-	70-73 = C-
87-89 = B+	67-69 = D+
84-86 = B	64-66 = D
80-83 = B-	61-63 = D-
	<60 = F

Late or missed deadlines (including exams)

The standard policy for this course is zero tolerance for missed deadlines. **Work submitted after the deadline will receive zero points.**

The professor reserves the right to accept late assignments in exceptional cases. If the student has a situation affecting his or her ability to comply with a deadline (including exam attendance), he or she must discuss it with the professor **before the deadline**. If the situation is an emergency, an explanatory email requesting additional time must be received in the professor's inbox up to five minutes **before** the regular meeting time of the course or the assignment's due time. **If these conditions are not met, requests for time extension will not be considered.** Exceptions will only be made on the most unique situations where the student was absolutely and unforeseeably unable to notify as described above, the situation was informed via email as soon as the student was able to do it, and further arrangements were discussed in person with the professor.

Academic Integrity

Students are expected to complete the course in compliance with the highest standards of academic integrity. Honest effort is expected of everyone. By continuing their enrolment in this course, the student pledges to abide by UC San Diego's Integrity of Scholarship Agreement (<https://academicintegrity.ucsd.edu/forms/form-scholarship-agreement.html>) which reads as follows (some modifications were made to adjust it to the present course):

1. No student shall knowingly procure, provide, or accept any materials that contain questions or answers to any examination or assignment to be given at a subsequent time.
2. No student shall complete, in part or in total, any examination or assignment for another person.
3. No student shall knowingly allow any examination or assignment to be completed, in part or in total, for himself or herself by another person.
4. No student shall plagiarize or copy the work of another person and submit it as his or her own work.
5. No student shall employ aids excluded by the instructor in undertaking course work.
6. No student shall alter graded class assignments or examinations and then resubmit them for regrading.
7. No student shall submit substantially the same material in more than one course without prior authorization. A student acting in the capacity of an instructional assistant (IA), including but not limited to teaching assistants, readers, and tutors, has a special responsibility to safeguard the integrity of scholarship. In these roles the student functions as an apprentice instructor, under the tutelage of the responsible instructor. An IA shall equitably grade student work in the manner agreed upon with the course instructor. An IA shall not make any unauthorized material related to tests, exams, homeworks, etc. available to any student.
8. No student shall provide their assignments, in part or in total, to any other student in current or future classes of this course. No student shall procure or accept assignments from any other student from current or prior classes of this course.

9. For all group assignments, each member of the group is responsible for the academic integrity of the entire submission.
10. Each student is responsible for knowing and abiding by UCSD's Policies on Integrity of Scholarship (<http://academicintegrity.ucsd.edu/>) and Student Conduct (<https://students.ucsd.edu/sponsor/student-conduct/>). Any student violating these policies will earn an 'F' in the course and will be reported to the University for the violation.

Attendance

Attendance is part of the final grade of the course. Points will be deducted for unexcused absences and late arrivals. Students arriving late to class have to inform the professor at the end of the class or they will be marked as absent. All absences must be justified in person before class, or up to 5 minutes before the meeting via email in case of emergencies. Notification of absence only guarantees consideration for excuse, and will not entail automatic exemption from class attendance. The professor reserves the right to excuse the student from attendance.

Accommodations for Students with Disabilities

If you have a disability for which you are or may be requesting accommodations, please inform the professor as soon as possible, and contact Office for Students with Disabilities (<https://students.ucsd.edu/well-being/disability-services/>). You must have documentation from the Office before accommodations can be granted.

Course outline

- I. Introduction to Marine Archaeology**
 - a. Underwater, Marine/Maritime or Nautical archaeology?
 - b. The natural/physical context
 - c. Understanding the relationship between people and the sea
- II. Methods and Fieldwork**
 - a. Safety
 - b. Search and Survey
 - c. Excavation
 - d. Post-excavation
- III. In practice**
 - a. Communities and archaeological practice
 - b. Legislation and protection of Heritage

Preliminary Schedule

The official course schedule will be posted in TritonEd and updated regularly. All students must refer to the course's webpage for information lectures, readings and assignments.

On...	we will discuss...	this class will be...	so, before class, please read...	and be ready to...
1/8	What is Marine Archaeology	lecture	Bowens Chapter 2 AND Bass 2011 (Recommended additional reading: Flatman 2003)	

1/10	What is NOT Marine Archaeology	lecture	Flatman 2007 (Recommended additional reading: Maarleveld 2011)	Discuss in small groups
1/15	Basic principles of Marine Archaeology	outside / hands-on		Thing about site formation processes Play in the sand Work with your hands Take field notes
1/17	The natural and physical context	lecture	Dincauze 2000 chapter 3 AND Wright 2016	Submit your field notebook
1/22	The natural and physical context 2: Sea level rise and submerged landscapes	lecture	Bailey and Flemming 2008 AND Benjamin and Bailey 2017 (Recommended additional reading: Grøn 2004; Rick and Erlandson 2009; O'Sullivan 2004)	
1/24	Cognitive landscapes	outside / hands-on		Go outside Prepare a map Share results Talk in front of class Work in groups Take field notes
1/29	Maritime Culture	lecture	Westerdahl 1992 AND Ransley 2011 (Recommended additional reading: Westerdahl 2011; Agius et al. 2016)	Submit your notebook Discuss in small groups SELECT YOUR POSTER TOPICS
1/31	Ports and Commerce	lecture	Polónia 2010	Discuss in small groups
2/5	Types of archaeological materials and preservation	lecture	Bowens Chapter 4 AND Martin 2011	
2/7	Introduction to field work and safety underwater	Guest Lecture Mariela Declet	Bowens Chapter 6	

2/12	Mental map and navigation	Outside / hands-on	Bowens Chapter 11	Go outside Walk in the sand Work in groups Use technology Apply the techniques from the chapter Take field notes
2/14	Field methods in Archaeology: Search patterns	Outside / hands-on	Bowens Chapters 12 (Recommended additional reading: Bowens Chapter 14 and Tuttle 2011)	Go outside Walk in the sand Work in groups Design search pattern Apply the techniques from the chapter Take field notes
2/19	Geophysical and acoustics survey	Guest Lecture Prof. John Hildebrand	Bowens Chapter 13 AND Quinn 2011 AND Grøn and Boldreel 2014	Submit your field notebook
2/21	Measurements and recording	Outside / hands-on	Bowens Chapter 14	Go outside Kneel on the sand Work on the ground Work in groups Apply the techniques from the chapter Take field notes
2/26	The logistics of marine fieldwork, excavation and documentation	Guest lecture Prof. Tom Levy	Bowens Chapter 8 AND 15 AND Underwood 2011	Submit your field notebook
2/28	Post Fieldwork: Site Preservation, First-aid and Conservation	lecture	Bowens Chapter 16 AND Hamilton and Smith 2011	[This topic may be eliminated if we need the extra time to complete other topics] SELECT DEBATE TEAMS

3/5	Legislation and protection of underwater heritage	lecture	Bowens Chapter 7 AND 2001 UNESCO Convention (www.unesco.org/culture/Underwater/infokit_en) (Recommended additional reading: Maarleveld 2011)	
3/7	Ethics	discussion	SAA Code of Ethics and UNESCO Code of Ethics for Divers	Discuss ethics in large groups and participate in class
3/12	The San Jose - DEBATE	debate		Work in groups Debate
3/14	Discussion and Review POSTER SESSION	hands-on		Present your posters to the public Have fun
3/19	FINAL EXAM			

Required or recommended readings:

- Agius, Dionisius A., John P. Cooper, Lucy Semaan, Chiara Zazzaro, and Robert Carter. 2016. "Remembering the Sea: Personal and Communal Recollections of Maritime Life in Jizan and the Farasan Islands, Saudi Arabia." *Journal of Maritime Archaeology* 11 (2). Springer US: 127–77. doi:10.1007/s11457-016-9159-2.
- Bailey, Geoff, and N Flemming. 2008. "Archaeology of the Continental Shelf: Marine Resources, Submerged Landscapes and Underwater Archaeology." *Quaternary Science Reviews* 27 (23–24). Elsevier Ltd: 2153–65. doi:10.1016/j.quascirev.2008.08.012.
- Bass, George. 2011. "The Development of Maritime Archaeology." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Castambis, Ben Ford, and Donny L. Hamilton, 3–22. Oxford, UK: Oxford University Press.
- Cohn, Arthur B., and Joanne M. Dennis. 2011. "Maritime Archaeology, the Dive Community and Heritage Tourism." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Castambis, Ben Ford, and Donny L. Hamilton, 1055–84. Oxford, UK: Oxford University Press.
- Dincauze, Dena. 2000. *Environmental Archaeology Principles and Practice. North*. Cambridge: Cambridge University Press.
- Flatman, Joe. 2003. "Cultural Biographies, Cognitive Landscapes and Dirty Old Bits of Boat: 'theory' in Maritime Archaeology." *The International Journal of Nautical Archaeology* 32 (2): 143–57.
- . 2007. "The Origins and Ethics of Maritime Archaeology – Part I." *Public Archaeology* 6 (2): 77–97. doi:10.1179/175355307X230739.

- Grøn, Ole. 2004. "Underwater Landscapes: Unrecognized Cultural Heritage and Research Resource." *Archaeology International* 8 (18–21). doi:10.5334/ai.0806.
- Grøn, Ole, and Lars Ole Boldreel. 2014. "Chirping for Large-Scale Maritime Archaeological Survey: A Strategy Developed from a Practical Experience-Based Approach." *Journal of Archaeology* 2014: 1–11. doi:10.1155/2014/147390.
- Hamilton, Donny L., and C. Wayne Smith. 2011. "The Archaeological Role of Conservation in Maritime Archaeology." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 286–304. Oxford, UK: Oxford University Press.
- Jameson, John H. Jr. 2014. "Toward a Multivocality in Public Archaeology: Public Empowerment Through Collaboration." In *Between the Devil and the Deep. Meeting the Challenges in the Public Interpretation of Maritime Cultural Heritage.*, edited by Della A. Scott-Irenton, 3–10. New York: Springer.
- Maarleveld, Thijs J. 2011. "Ethics, Underwater Cultural Heritage and International Law." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 917–41. Oxford, UK: Oxford University Press.
- Martin, Colin. 2011. "Wreck-Site Formation Processes." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Castambis, Ben Ford, and Donny L. Hamilton, 47–67. Oxford, UK: Oxford University Press.
- O'Sullivan, Aidan. 2004. "Place , Memory and Identity among Estuarine Fishing Communities : Interpreting the Archaeology of Early Medieval Fish Weirs." *World Archaeology*, no. 789275175. doi:10.1080/0043824042000185810.
- Polónia, Amélia. 2010. "European Seaports in the Early Modern Age : Concepts , Methodology and Models of Analysis." *Cahiers de La Méditerranée*, no. 80: 17–39.
- Pomey, Patrice. 2011. "Defining a Ship: Architecture, Function and Human Space." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 25–46. Oxford, UK.
- Quinn, Rory. 2011. "Acoustic Remote Sensing in Maritime Archaeology." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 68–89. Oxford, UK: Oxford University Press.
- Ransley, Jesse. 2011. "Maritime Communities and Traditions." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 879–905. Oxford, UK: Oxford University Press.
- Rick, Torben C., and Jon M. Erlandson. 2009. "Coastal Exploitation." *Science* 325 (5943): 952–53. doi:10.1126/science.1178539.
- Runyan, Timothy. 2011. "Management of Maritime Cultural Resources: An American Perspective." In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 942–66. Oxford, UK: Oxford University Press.
- Sorset, Irina. 2014. "Connecting People to the Past: An Ethnographic Approach to Maritime Heritage Interpretation and Recreation." In *Between the Devil and the Deep. Meeting the*

Challenges in the Public Interpretation of Maritime Cultural Heritage., edited by Della A. Scott-Ireton, 43–54. New York: Springer.

Tuttle, Michael C. 2011. “Search and Documentation of Underwater Archaeological Sites.” In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsanbis, Ben Ford, and Donny L. Hamilton, 114–32. Oxford, UK: Oxford University Press.

Underwood, Chris. 2011. “Excavation Planning and Logistics: The HMS Swift Project.” In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 133–60. Oxford, UK: Oxford University Press.

Westerdahl, Christer. 1992. “The Maritime Cultural Landscape.” *The International Journal of Nautical Archaeology* 21 (1): 5–14.

———. 2011. “The Maritime Cultural Landscape.” In *The Oxford Handbook of Maritime Archaeology*, edited by Alexis Catsambis, Ben Ford, and Donny L. Hamilton, 733–62. Oxford, UK: Oxford University Press.

Wright, Jeneva. 2016. “Maritime Archaeology and Climate Change: An Invitation.” *Journal of Maritime Archaeology* 11 (3). Springer US: 1–16. doi:10.1007/s11457-016-9164-5.