Maritime Archaeology - Method, Theory and Practice in Global Perspective

Prof. Isabel C. Rivera-Collazo

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<tr>
<th>Professor’s Contact Information</th>
<th>Course Information</th>
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<tr>
<td><strong>Office</strong>: Social Sciences Build. 291 or Sverdrup Hall 1147</td>
<td><strong>ANAR 164</strong></td>
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<tr>
<td><strong>Office Hours</strong>: By Appointment</td>
<td><strong>Warren Lecture Hall Room 2115</strong></td>
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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 objectives:
By the end of this course, the student will be able to:

1) Explain the difference between marine, underwater and nautical archaeology.
2) Acknowledge the links between natural and social processes and recognize the dynamism of coastal landscapes through time.
3) Express how the marine/aquatic settings affect the archaeological record.
4) Recognize the complexity of the ‘maritime culture’ concept as well as the wide range of archaeological evidences linked to human use of marine and coastal resources.
5) Identify broad trends regarding shipbuilding technology.
6) Understand and communicate the advantages, disadvantages and limitations of underwater archaeological research.
7) Identify the basic concepts for the localization, identification, excavation, and conservation of cultural resources from aquatic environments.
8) Differentiate between underwater archaeology, recreational diving, professional and scientific diving and treasure hunting as intervention practices in submerged archaeological deposits.
9) Explain and apply the ethics and jurisdictional aspects of archaeology in coastal and submerged environments.
10) Explain the importance of the past for the understanding human-ocean dynamics in the present.

Required reading:

Other recommended references:

**Expectations:**
This course will be dictated as lectures with opportunity for discussion. The students will be expected to attend class, do all assigned readings, and participate actively.

**Assignments**
Grading will be based on the student’s performance on the following assignments.

**Non-graded assignments**
1. Weekly reports (100 points):
   - Students will hand in a weekly report up to 2-page in length. The report will be formatted as an outline and must detail 1) all topics covered the previous week with a few explanatory sentences or bullet points of the most important elements about that topic; and 2) all readings done for the week, with a short paragraph (up to 200 words) summarizing each one.
   - These reports will not be graded, but each one has a total value of 10 points and add up to one full mark towards the final grade of the course.
   - These outlines will help the student organize their notes in class in preparation for the exams.
2. Attendance (100 points)
   - Attendance is one full mark towards the final grade. Points will be deducted for late arrival to class.

**Graded assignments**
1. Mid-Term Exam (150 points)
2. Final Exam (150 points)

**Policies**
**Total course grading**
The final grading for this course will be measured out of a total of 500 points, divided in the following manner:

<table>
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<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>100</td>
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<tr>
<td>Weekly reports (10 total)</td>
<td>100</td>
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<tr>
<td>Mid-Term</td>
<td>150</td>
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<tr>
<td>Final Exam</td>
<td>150</td>
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<tr>
<td><strong>TOTAL POINTS</strong></td>
<td><strong>500</strong></td>
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**Grading scale**

- 94-100 = A
- 90-93  = A-
- 87-89  = B+
- 84-86  = B
- 80-83  = B-
- 77-79  = C+
- 74-76  = C
- 70-73  = C-
- 67-69  = D+
- 64-66  = D
- 60-63  = 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 archaeology under the water
   a. Underwater, Marine/Maritime or Nautical archaeology?
   b. The natural/physical context

II. How people have used the marine environment and what is left as archaeological evidence
   a. Maritime culture
   b. Ports and Commerce
   c. Nautical technology

III. Research methods
   a. Before fieldwork: health and safety, background research
   b. During fieldwork: survey, excavation, and documentation
   c. After fieldwork: conservation

IV. Protection of the submerged and coastal heritage
   a. Legislation
   b. Importance of local communities

Schedule

<table>
<thead>
<tr>
<th>On…</th>
<th>we will discuss…</th>
<th>so, before class, please read…</th>
<th>and be ready to think and talk about…</th>
<th>Remember your Weekly Report Due Dates</th>
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</table>
| 1/9 – 1/11| What is Marine Archaeology | Bowens Chapter 2 AND Bass 2011 (Recommended additional reading: Flatman 2003) | What is archaeology
What is Marine Archaeology
History of Marine Archaeology | Report Week 1 DUE 1/18 |
| 1/13      | What is NOT Marine Archaeology | Flatman 2007 (Recommended additional reading: Maarleveld 2011) | Ethical behavior in archaeology | |
| 1/16      | Martin Luther King Holiday | | | Catch up on your Reading |
| 1/18 – 1/20| The natural and physical context | Dincauze 2000 chapter 3 AND Wright 2016 | Why climate changes
How do changes affect the archaeological record
How climate change affects landscapes | Report Week 2 DUE 1/23 |
| 1/23 – 1/25| Basic principles of Marine Archaeology | Bowens Chapter 4 AND Martin 2011 | What are archaeological sites
What is taphonomy
How do sites survive | Report Week 3 DUE 1/30 |
<table>
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<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
<th>Study Points</th>
<th>Due Date</th>
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| 1/27       | Maritime Culture                           | Westerdahl 1992 (Recommended additional reading: Westerdahl 2011; Ransley 2011; Agius et al. 2016) | How the relationship with the sea influences culture  
What cultural aspects are common to coastal societies  
How can these elements be studied | Report Week 3 DUE 1/30 |
| 1/30 and 2/1 | Ports and Commerce                        | Polonia 2010                                  | What are the structural remains of ports and trade  
What are the variables involved in their study  
What is their archaeological visibility  
How can they be systematically studied | Report Week 4 DUE 2/6 |
| 2/3        | Ships and nautical technology              | Gould 2011 Chapter 3 (Recommended additional reading: Pomey 2011) | What defines a ship  
What is the social significance of nautical technology  
What are the basic mechanics of efficient boat-building | |
What type of sites can be expected underwater  
How do people exploit marine resources | Report Week 5 DUE 2/13 |
| 2/8        | Review and catch up                        |                                              | What have you learned  
What needs further explanation  
What would you like to discuss further | |
| 2/10       | MID TERM                                   |                                              | Exam will cover all topics, including Week 5 | |
| 2/13       | Introduction to field work and safety underwater | Bowens Chapter 6 | How does one go around doing archaeology underwater?  
What conditions of the coastal and aquatic environments affect fieldwork?  
What are the most important health and safety considerations of this type or work? | Report Week 6 DUE 2/22 |
| 2/15 and 2/17 | Field methods in Archaeology: measurements and recording | Bowens Chapters 8 AND Chapter 14 | What are the scientific standards for recording in Archaeology?  
Are these standards different for Underwater Archaeology? | |
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<tr>
<th>Date</th>
<th>Activity</th>
<th>Reading Material</th>
<th>Questions</th>
<th>Deadline</th>
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<tr>
<td>2/20</td>
<td>President’s Day Holiday</td>
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<td>2/22</td>
<td>Underwater Search and Survey</td>
<td>Bowens Chapter 12 (Recommended additional reading: Bowens Chapter 14 and Tuttle 2011)</td>
<td>What is the difference between Search and Survey</td>
<td>Report Week 7 DUE 2/27</td>
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<td>What are the direct methods for searching, locating, identifying and documenting archaeological sites on the sea floor</td>
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<td>2/24 and 2/27</td>
<td>Geophysical and acoustics survey</td>
<td>Bowens Chapter 13 AND Quinn 2011 (Recommended additional reading: Grøn and Boldreel 2014)</td>
<td>What remote sensing methods can be used to identify archaeological sites on and under the sea floor surface</td>
<td>Report Week 8 DUE 3/6</td>
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<td>What methods are more efficient</td>
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<td>What are their limitations</td>
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<td>3/1 and 3/3</td>
<td>The logistics of marine fieldwork, excavation and documentation</td>
<td>Bowens Chapter 15 AND 17 AND Underwood 2011</td>
<td>What destructive methods are used in underwater archaeology research</td>
<td>Report Week 9 DUE 3/13</td>
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<td>How is excavation conducted</td>
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<td>How are objects documented</td>
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<td>3/6</td>
<td>Post Fieldwork: First-aid and Conservation</td>
<td>Bowens Chapter 16 (Recommended additional reading: Hamilton and Smith 2011)</td>
<td>How does the marine environment affect the archaeological record</td>
<td>Report Week 9 DUE 3/13</td>
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<td>What considerations must be made before removing artefacts from the sea bottom</td>
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<td>Why is conservation important</td>
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<td>3/8</td>
<td>Post Fieldwork: Analysis and Publications</td>
<td>Bowens Chapter 19 (Recommended additional reading: Chapter 20)</td>
<td>What to do once excavation is over</td>
<td>Report Week 9 DUE 3/13</td>
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<td>How is the archaeological record analyzed and interpreted</td>
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<td>Why, where and how to publish</td>
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<td>3/10</td>
<td>Communities and the protection of Maritime Cultural Resources</td>
<td>Jameson 2014 AND Sorset 2014 (Recommended additional reading: Runyan 2011; Cohn and Dennis 2011)</td>
<td>Who does the past belong to</td>
<td>Report Week 9 DUE 3/13</td>
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<td>How and why to involve communities</td>
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<td>How can archaeological sites be protected</td>
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<td>What is the 2001 UNESCO Convention</td>
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(Recommended additional reading: Maarleveld 2011)  
Who has the political power to protect the archaeological heritage  
Who has ratified the convention and who has not  

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<tr>
<th>Date</th>
<th>Event</th>
<th>Discussion and Review</th>
<th>What have you learned</th>
<th>What needs further explanation</th>
<th>What would you like to discuss further</th>
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<td>3/17</td>
<td>Discussion and Review</td>
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<td>TBA</td>
<td>FINAL EXAM</td>
<td>Date to be announced</td>
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Report Week 10  
DUE 3/17

**Required or recommended readings:**


Oxford University Press.


Additional Research Resources

- International Journal of Nautical Archaeology (onlinelibrary.wiley.com/journal/10.1111/(ISSN)1095-9270)
- Journal of Coastal and Island Archaeology (www.tandfonline.com/loi/uica20)
- Journal of Maritime Archaeology (link.springer.com/journal/11457)
- Institute of Nautical Archaeology (nauticalarch.org/)
- Scripps Center for Marine and Environmental Archaeology at UCSD (website under construction)
- Nautical Archaeology Society (www.nauticalarchaeologysociety.org/)
- Society for Historical Archaeology (www.sha.org)
- Society for American Archaeology (www.saa.org)