# Anthropology 605
# Conservation of Archaeological Resources I
Fall 2020

**Course Description**
This course introduces students to the techniques of stabilizing and preserving deteriorated or corroded artifacts from archaeological sites. Proper conservation techniques are introduced in seminar/laboratory sessions designed to familiarize students with the chemicals, equipment, and procedures used in the treatments. Practical experience will be gained in treating organic and siliceous materials, and the various metals commonly found in prehistoric and historic sites. The emphasis will be on the basic conservation processes successfully used on the most commonly encountered artifacts recovered from archaeological sites.

The Conservation Research Laboratory (CRL) is a working laboratory. Therefore, all class and laboratory work is expected to be performed between 2:00 PM and 4:30 PM on Tuesdays and Thursdays.

Location: Anthropology 102
Time: Tu/Th 2:00 – 4:30pm
Instructor: Christopher Dostal
Email: dostalc@tamu.edu
Office Hours: Thursday 12:00 – 2:00 pm
Office: 102a

**Prerequisites**:
Graduate classification or instructor approval

**Textbook**:
*Methods of Conserving Archaeological Material from Underwater Sites* by Donny L. Hamilton
The Elements of Archaeological Conservation by J.M. Cronyn

Additional readings will be provided as .PDF files by the instructor.

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**Class Format**
Class meets for 2.5 hours twice per week. The Tuesday class each week will be the lecture and technical demonstrations, and the Thursday class will be a lab day for students to work.

**Grading**

Exams (2) – 25% each
Organic Material Conservation Report -20%
Metal Material Conservation Report -20%
Ceramic Restoration Project - 10%
Pop quizzes on readings – up to 5% bonus
Failure to maintain a clean workstation throughout the semester will result in a 5% deduction from your total grade.

Grading Scale

| | |
|---|---|
| 90-100% | A |
| 80-89% | B |
| 70-79% | C |
| 60-69% | D |
| 0-59% | F |

Make-up exams will be made available with an approved excuse per the University rules (http://student-rules.tamu.edu/rule07).

**Exams**

Each exam is worth 25% of your final grade. The date of the final exam is set by the university. No early exams will be administered.

Exam 1: October 13th
Exam 2: November 24th

**Reports**

The first report will cover the conservation techniques used for non-metallic materials, and the second report will cover metallic materials. Each report should emphasize the student's own laboratory experiences as well as pertinent observations and comparisons of methods garnered from lectures and readings. For each material conserved, you should address how it deteriorates, treatment options and their respective strengths, and your observations from the lab work. **It is essential that you take prolific notes and photos throughout the semester of everything you do and observe in order to produce an adequate report**. Each report should be succinct, clear, and **very** well-edited. Be sure to cite your sources in-text, with page numbers, and include a bibliography. All figures and tables should be labelled and mentioned in text.

**Note** – Treated samples **MUST** be included with each report, no exceptions or excuses. A report is not considered submitted until **all** of the associated samples are submitted with it. Late reports will lose a letter grade per day.

All reports must be turned in digitally, with a 12pt Times New Roman font, in a .docx format. Reports should follow the formatting guidelines of the OGAPS Thesis manual.

**Ceramic Reconstruction**

During the semester, each student will decorate, destroy, and reconstruct a terracotta flower pot, which is worth 10% of your grade. The pots will be evaluated on both technical proficiency and the overall finished aesthetic.

**Laboratory Policies**

- **Be safe** – appropriate PPE must be worn at all time, no exceptions. Failure to comply will result in removal from lab.
- **Be informed** – you cannot reason with a chemical burn or hazardous exposure; you MUST be informed on the chemicals and materials you will be using before you use them.
- **Be clean** – A clean lab space minimizes risks to health, safety, and prevents accidental damage to the artifacts. If you use something, clean it and put it back where it belongs when you are done. My assistant can help direct you to where things belong. Your work station should be spotless when you are not actively working.
- **Be organized** – Every procedure you follow should be fully delineated before you begin, and you should then carefully follow that procedure. All materials and containers needed

for the procedure must be collected *before* starting any work. All procedures must be approved by me before you begin.

**No eating or drinking are allowed in the lab on lab days. Liquids in a closed containers are permitted on lecture days. Closed toed-shoes and long pants are mandatory for lab days.**

**Covid 19 Social Distancing and Safe Practices in Class**

Due to the hands-on nature of this lab course, in-person classes are necessary. To ensure the health and safety of everyone in the class, nobody is permitted in the lab without respiratory masks covering both the nose and mouth. Strict social distancing will be enforced, and any students who habitually violate the 6ft boundary of another student will be removed from class. Safety gloves and frequent hand washing is essential to maintaining a healthy and productive working environment. Lecture classes (usually Tuesday) will be simulcast on Zoom for students who want to stay home; my recommendation will be to come to the lectures in person if you are not feeling ill, because of the hands-on and demonstrative nature of the lectures.

**Academic Honor:**

"An Aggie does not lie, cheat, or steal or tolerate those who do."
Find the Student Honor Council rules and procedures here: http://aggiehonor.tamu.edu

**Americans with Disabilities Act (ADA) Policy:**

Americans with Disabilities Act (ADA) Policy Statement

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit http://disability.tamu.edu.

Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

**Plagiarism Statement**

(From http://writingcenter.tamu.edu/Faculty/Teaching-Writing-or-Public-Speaking/Developing-Your-Method-of-Instruction/Citation-Documentation Accessed 9/8/15)

According to the Texas A&M University Definitions of Academic Misconduct, plagiarism is the appropriation of another person's ideas, processes, results or words without giving appropriate credit (aggiehonor.tamu.edu). You should credit your use of anyone else's words, graphic images, or ideas using standard citation styles. If I should discover that you have failed to properly credit sources or have used a paper written by someone else, I will recommend that you receive an F in this course. The Aggie Honor System Office processes for adjudication and appeals can be found at http://aggiehonor.tamu.edu

**Title IX and Statement on Limits to Confidentiality**

Texas A&M University and the College of Liberal Arts are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees — including instructors — cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community.

As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, **even if you do not want the disclosed information to be shared**:

Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus. These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Student Counseling Service (https://scs.tamu.edu/). Students and faculty can report non-emergency behavior that causes them to be concerned at http://tellsomebody.tamu.edu.

**Attendance**

Texas A&M views class attendance as an individual student responsibility. Students should attend all classes and complete all assignments if they wish to make a good grade. Please refer to Student Rule #7 for details concerning reasons for excused absences and protocols for making up work missed during excused absences (http://student-rules.tamu.edu/rule07).

**Anthropology Department Diversity Statement**

Respect for cultural and human biological diversity are core concepts of Anthropology. In this course, each voice in the classroom has something of value to contribute to class discussion. Please respect the different experiences, beliefs and values expressed by your fellow students and instructor, and refrain from derogatory comments about other individuals, cultures, groups, or viewpoints. The Anthropology Department supports the Texas A&M University commitment to Diversity, and welcomes individuals of all ages, backgrounds, citizenships, disabilities, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences (See http://diversity.tamu.edu/).

Schedule
(Subject to change)

Week 1

August 20th — Introduction, lab tour, safety overview

Week 2

August 25th — Adhesives & Consolidants lecture

**Readings**:

- Ashley-Smith, J. et al. (1992) Science for Conservators Vol. 3: Adhesives and Coatings. P. 49-56; 57-89. Routledge Publishing, London.
- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 11- 14

August 27th — Adhesives & Consolidants Lab

Week 3

September 1st — Bone & Ivory

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 15-16
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 238-245; 275-282. Routledge Publishing, London.

September 3rd — Bone & Ivory Lab

Week 4

September 8th — Wood

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 22-29
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 246-263. Routledge Publishing, London

September 10th — Wood Lab

Week 5

September 15th — Wood (con't)

**Readings:**

- Historic England (2010) Waterlogged Wood: Guidelines on the Recording, Sampling, Conservation, and Curation of Waterlogged Wood.
- McCawley, J. (1977) Waterlogged Artifacts: The Challenge to Conservation. *Journal of the Canadian Conservation Institute*. Vol. 2 pp 17-26.

September 17th — Wood Lab II

Week 6

September 22nd — Leather

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 30-33
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 263-274. Routledge Publishing, London

September 24th — Leather Lab

Week 7

September 29th — Textiles, Rope, & Misc Organics

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 30-33
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 248-295. Routledge Publishing, London

October 1st — Textiles, Rope, & Misc Organics Lab

Week 8

October 6th — Glass, Pottery, & Stone

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 38-48
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 160-176. Routledge Publishing, London

October 8th — Lab / Exam review

Week 9

October 13th — **Exam 1 – Non Metal Artifacts (REPORT 1 DUE)**

October 15th — Introduction to Metals

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 38-48
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 160-176. Routledge Publishing, London

Week 10

October 20th — Iron & Electrolytic Cleaning

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 49-72
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 176-202. Routledge Publishing, London

October 22nd — Iron Lab

Week 11

October 27th — Copper, Brass, Bronze

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 73-77
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 213-230. Routledge Publishing, London
- Keith, D. et al. (1997). A Bronze Cannon from La Belle: Its Construction, Conservation, and Display. IJNA Vol. 26 No. 2. Pp. 144-158
- Weisser, T. (1987). The use of sodium carbonate as a pre-treatment for difficult-to-stabilize bronzes. In *Recent advances in the conservation and analysis of artifacts*. London: Summer Schools Press. 105–8

October 29th — Copper, Brass, Bronze Lab

Week 12

November 3rd — Lead, Tin, Pewter

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 85-87
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 201-213. Routledge Publishing, London

November 5th — Lead, Tin, Pewter Lab

Week 13

November 10th — Silver, Gold, Composite Artifacts

**Readings:**

- Hamilton, D. (1999) Methods of Conserving Archaeological Material from Underwater Sites. P. 78-84, 88
- Cronyn, J. (1990). Elements of Archaeological Conservation. P. 230-237. Routledge Publishing, London
- Scott, D. (1983) The Deterioration of Gold Alloys and Some Aspects of Their Conservation. *Studies in Conservation* Vol. 28 No. 4. Pp 194-203.
- MacLeod, I and North, N. (1979) Conservation of Corroded Silver. *Studies in Conservation* Vol. 24 No. 4. Pp 165-170.
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November 12th — Silver, Gold, Composite Artifacts Lab, Lab Cleanup

Week 14

November 17th — Modern Metals

November 19th — Lab Cleanup, project wrap-ups, exam review

*Exam review will commence *after* the lab is clean, with whatever time remains.

Week 15 – Final Week of Classes

**November 24th — Final Exam , Report 2 Due, Ceramic Reconstruction Due**