

LABORATORY TECHNIQUES

PURPOSE

To acquaint the student with the methods and materials used in the processing, cataloging, preservation, and storage of artifacts and to provide hands-on experience with artifacts recovered from archaeological sites.

OBJECTIVES

After completing this course, the student is able to perform the following or similar tasks with minimal supervision.

1. Clean artifacts using correct cleaning agents, tools, and procedures.
2. Analyze and classify ceramic artifacts.
3. Analyze and classify lithic artifacts.
4. Use various tools such as hand lenses, scales, Munsell Soil Color Chart, and calipers.
5. Complete analysis forms.
6. Correctly place identification information on artifacts.
7. Be aware of proper materials and procedures used in reconstruction and storage of artifacts and know where to procure such materials.
8. Follow correct procedures for reconstruction of artifacts.

In addition, the student is to have knowledge of procedures and materials used in cleaning, analyzing, and preserving shell, bone, glass, fabric, leather, wood, paper, and basketry. The actual cleaning, analysis, and/or preservation of these materials would be reserved for a Laboratory Techniques II class.

COURSE OUTLINE

- A. There are at least three (3) major areas for discussion in this course:
 1. Artifact processing
 2. Cataloging and restoration
 3. Artifact preservation and storage

COURSE OUTLINE (continued)

- B. The discussion or curriculum for each study area should start with the theory behind each area, or more simply, how it is done and why it is important
1. Artifact processing
 - a. Theory/rationale
 - b. Treatment of artifacts
 - Classification of artifacts that come into the lab
 - Cleaning/care of each artifact class
 - Restoration of artifacts where appropriate
 - Other discussions that may be pertinent
 2. Cataloging and restoration
 - a. Theory/rationale
 - b. Specific systems may vary with institution
 - c. Basic requirements, placement of artifact within proper context
 - Project or source (donation, private collection, etc.)
 - Archaeological provenience
 - Temporal if determinable
 - Artifact category
 3. Preservation and storage
 - a. Theory/rationale
 - b. Application
 - Classes of artifacts needing preservation
 - Techniques of preservation apropos to each class
 - Permanent storage of artifacts
 - Need for recovery systems for data, as well as for actual artifacts
 - Other

REQUIREMENTS

- A. 20 hours of CLASS WORK
1. Lab Techniques Seminar required (6 hours)
 2. Typology (2 hours)
 3. Remaining hours should cover the following categories: (12 hours)
 - a. Archaeological ceramics
 - b. Archaeological lithics
 - c. Osteology: human and animal
 - d. Environmental reconstruction (Paleo-ecology)
 - e. Dating methods
 - f. Special analytical techniques (not covered in above areas)
- B. 40 hours of WORK EXPERIENCE. This should include at least 10 hours in each of three (3) Lab Techniques seminar discussion areas:

1. Artifact processing
2. Cataloging and restoration
3. Artifact preservation and storage

REFERENCES

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1929 *Tables for Determining Common Minerals and Rocks*. Bulletin of the University of New Mexico, Geological Series, Vol. IV, No. 1
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- Joukowsky, Martha
1980 *A Complete Manual of Field Archaeology: Tools and Techniques of Field Work for Archaeologists*. Prentice-Hall, Englewood Cliffs.
- Kidder, A. V.
1932 *The Artifacts of Pecos*. Papers of the Phillips Academy Southwestern Expedition, No. 6, New Haven.
- Shepard, Anna O.
1959 *Ceramics for the Archaeologist*. Publication 609, Carnegie Institute of Washington. Reprint 1976.
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