

LITHIC ANALYSIS WORKSHOP

PURPOSE

This is an introductory workshop in the study of lithic artifacts. It will provide an up-to-date synthesis of the analysis of lithic tools and debitage for members of the Arizona Archaeological Society who are enrolled in the Certification Program. The class has five broad objectives:

1. to familiarize students with the basic principles of lithic technology,
2. to provide "hands-on" experience in flintknapping and the replication of lithic assemblages,
3. to examine technological and functional models of tool manufacturing, use, and maintenance,
4. to examine analytical and classification techniques for the study and interpretation of lithic assemblages, and,
5. to familiarize students with some of the more well-known lithic assemblages found in Arizona and other parts of North America.

FORMAT

The workshop is designed to be presented in twenty hours of classroom and laboratory instruction. This will be presented in 8 sessions of 2½ hour classes. Each class session will contain two sections: the first section will be a discussion of particular issues in lithic technology, and the second section will be a lab involving experimental studies or the analysis of lithic assemblages.

WORKSHOP REQUIREMENTS

Each student will need protective eyewear such as safety glasses or goggles and gloves, preferably leather. Tools for workshop use and lithic raw materials will be provided.

OBJECTIVES

At the end of this course, the student will be able to:

1. Describe the basic principles involved with the production of lithic tools.
2. Identify general classes of lithic raw materials common to lithic assemblages in the Southwest.
3. Distinguish lithic artifacts from nonartifactual lithic materials.
4. Identify several different kinds of lithic debitage frequently observed at archaeological sites.

5. Explain the differences between at least two different contemporary approaches to debitage analysis and classification.

OBJECTIVES (continued)

6. Identify the principle kinds of lithic tools recovered from archaeological sites in the Southwest.
7. Determine the presence and location of used edges on lithic tools and the possible functions they served.
8. Describe several models for the manufacturing, use, and maintenance of lithic tools presented in the archaeological literature.
9. Describe the contributions of at least three researchers who have provided fundamental insights into the nature and use of lithic artifacts.

WORKSHOP OUTLINE

1. Basic principles of lithic technology
Lithic raw material identification

Lab: Introduction to flintknapping
2. Lithic raw material procurement and quarrying
Models of lithic core and flake tool production

Lab: Flintknapping - Making simple core and flake tools
3. Site formation processes and lithic assemblages
Models of bifacial tool production

Lab: Flintknapping - Making bifacial tools
4. Models of tool maintenance and use-life

Lab: Flintknapping - Resharpening lithic tools
5. Lithic use-wear analysis: High power and low power approaches

Lab: Analytical techniques for lithic use-wear analysis
6. Debitage classifications and analysis: Traditional stage
Typologies and the Sullivan and Rozen approach

Lab: Techniques fordebitage classification and analysis
7. Issues: Lithic tool classifications and analysis

Lab: Techniques for tool classification and analysis
8. Issues: Ground and pecked stone tools and implements

Lab: Making Hohokam ground stone tools.

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