From Rocks to Tools: Basic Lithic Analysis Workshop

April 4, 2026

10am – 3pm

Instructor: Sarah A. Allaun, Assistant State Archaeologist, Office of Archaeology & Historic Preservation

Workshop description:

Ready to move beyond "just rocks" and be able to interpret the archaeological record? This hands-on workshop is designed for participants of all experience levels who want to build confidence in the fundamentals of chipped stone analysis.

Across five focused hours, you'll move from core concepts to practical application. The morning session introduces raw material identification, the mechanics of stone tool production, and how to recognize key flake attributes. In the afternoon, you'll apply these skills in an Integrated Hands-On Lab, working directly with real chipped-stone assemblages. You'll practice classifying debitage and formal tools, learn standard measurement and recording techniques, and explore how lithic data relate human behavior, technological choices, and cultural patterns.

Whether you're new to lithics or looking to strengthen your analytical toolkit, this workshop offers a practical, approachable path into the world of chipped stone analysis.

Detailed Schedule:

Morning Session: Fundamentals and Typology (10am – 12pm)

- **Welcoming & Introduction - lecture/discussion (20 min)**
  - Workshop goals, safety notes, defining lithic analysis & why it matters, overview of raw materials (chert, obsidian, quartzite)
  - Materials: sample raw materials
- **Module 1: Fracture mechanics & feature identification – lecture/demonstration (60 min)**
  - The cone of force, conchoidal fracture, identifying key flake attributes: platform, bulb of percussion, eraillure scar, ripples, termination types
  - Materials: prepared flake demonstration samples
- **10 minute break**
- **Module 2: The reduction continuum & typology – lecture (30 min)**
  - Core-flake-tool sequence, defining cores (types), flakes (primary, secondary, tertiary), formal tool types
  - Materials: type collection of cores, flakes, and tools

12:00-12:45pm lunch break

Afternoon Session: Integrated Lab & Interpretation (12:45 – 3pm)

- **Integrated Lab Session – hands-on exercises (90 min)**
    - Exercise 1: Feature Identification: identify features on given flakes using checklists
    - Exercise 2: Classification & Measurement: sort a mixed assemblage, classify artifacts (core/flake/tool), and learn basic measurements (L, W, T, Mass) using calipers and scales
    - Materials: mixed artifact bags, hand lenses, digital calipers, small digital scales, standardized data sheets
- **Module 3: Data recording & interpretation – lecture/discussion (30 min)**
    - Completing a basic lithic analysis form, calculating simple indices (e.g., % cortical flakes), interpretation: linking artifact data to site activity and behavior
    - Materials: example analysis form
- **Wrap-up & Resources (15 min)**
    - Final Q&A, discussion of key readings and resources for continued learning
    - Materials needed: list of recommended bibliography