

# LITHICS

## Course Syllabus

### FOSA Continuing Education Spring 2023



#### Overview

**This course provides an introduction to lithic analysis following Andrefsky's work *Lithics: Macroscopic Approaches to Analysis*, 2<sup>nd</sup> ed. The objective is for FOSA members to gain basic facility with terminology, classification, and analysis of stone tools and stone tool production debris through seven weekly zoom courses supplemented by self-study reading assignments. It is hoped, schedule permitting, that the class can also meet in person for an in-person hands-on laboratory session to reinforce the book learning.**

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## **PROPOSED SYLLABUS**

### **Week 1. Introduction**

- **Fundamentals of Stone Tool Production**
- **Terminology**
- **Fracture Mechanic**

**Reading Assignment: Andrefsky 2005: 1-40, Chapters 1 and 2**

### **Week 2. Lithic Materials**

- **Introduction to rock grouping – based on rock genesis**
- **Macro and Geochemical analytical techniques**
- **CT Regional Indigenous lithic sources**

**Reading Assignment: Andrefsky 2005: 41-60, Chapter 3**

**Brockmann & Keegan 2016: 10-25**

**Andrefsky 1994:21-35**

### **Week 3. Lithic Analyses – Types, Typology, Analytical Attributes**

- **Type populations, Specimen Attributes and Variability**
- **Type classification Schemes – Criteria & Rules**
- **Biface Tools**
- **Flake Tools**
- **Core Tools**
- **Debitage**
- **Ground Stone Implements**

**Reading Assignment: Andrefsky 2005: 61-85, Chapter 4**

**Boudreau 2016: Introduction & pgs. 8-15**

#### **Week 4. Flake Debitage Attributes**

- **Condition & Termination**
- **Striking Platform**
- **Debitage Size / Dimensions**
- **Dorsal Flake Scars**
- **Select Approaches to Debitage Analysis**  
**Reading Assignment: Andrefsky 2005:86-112, Chapter 5**

#### **Week 5. Debitage Analysis**

- **Continued - Select Approaches to Debitage Analysis**  
**Reading Assignment: Andrefsky 2005:113-142, Chapter 6**  
**Andrefsky, 2001**

#### **Week 6. Stone Tool Analysis**

- **Core Analysis**
- **Flake Tool Analysis**
- **Biface Analysis**  
**Reading Assignment: Andrefsky 2005:143-200, Chapter 7**  
**Recommended Supplemental Reading: Macdonald, Douglas, et. al., 2014**

#### **Week 7. Laboratory – Hands-on Session**

- **Lithic Material Identification**
- **CT / New England Typology**
- **Identification of Biface Tools; Flake Tools; Core Tools; Debitage**
- **Tool & Flake Attribute Recognition**

#### **Week 8. Zoom Review Session**

- **Terminology**
  - **Core Analysis**
  - **Flake Tool Analysis**
  - **Biface Analysis**
  - **Analytical Approaches - Artifact Diversity and Site Function**
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## **LEARNING OBJECTIVES**

**As a result of meeting the requirements in this course, students will**

- 1. Understand the basics of stone tool production**
- 2. Understand basic principles of fracture mechanics**
- 3. Gain facility with basic lithic and fracture mechanics terminology**
- 4. Know basic lithic material identification**
- 5. Be introduced to regional (NY, CT, New England) indigenous lithic sources**
- 6. Gain concepts of tool function, modification and use life**
- 7. Learn standard techniques for recognition and recording of flake debitage attributes**
- 8. Gain overview of various approaches to debitage analysis**
- 9. Gain overview of Biface, Flake Tool and Core analyses**

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## **REFERENCES / RESOURCES**

**Andrefsky, William, 1994. Raw Material Availability and the Organization of Technology. *American Antiquity* 59:21-35.**

**Andrefsky, William, 2001. *Lithic Debitage, Context, Form, Meaning*. Salt Lake City, University of Utah Press**

**Andrefsky, William, 2005. *Lithics: Macroscopic Approaches to Analysis*, 2<sup>nd</sup> ed. Cambridge Manuals in Archaeology, Cambridge, UK, Cambridge University Press**

**Boudreau, Jeff, 2016. *A New England Typology of Native American Projectile Points*. Massachusetts Archaeological Society.**

**Brockmann, Mark, and Barry Keegan, 2016. *Indigenous Lithic Sources of Northeastern North America*. Farmington ME, Franklin Printing.**

**Macdonald, Douglas; William Andrefsky; Pei Lin; Yu Pei Lin, *Lithics in the West: Using Lithic Analysis to Solve Archeological Problems in Western North America*, University of Montana Press 2014**