

**ANTH 294-81: Topics in Anthropology: Understanding Stone Tools**

SUCO, Spring 2008

Class Meets: T 5:30-8:00, Fitzelle 312

**Instructor:** Cynthia Klink  
**Phone:** 436-3308  
**Email:** klinkcj@oneonta.edu

**Office:** Fitzelle 312  
**Office Hours:** W 1:00-2:00  
or by appointment

**Course Description:**

Knowledge of lithic (stone) artifacts and lithic analysis is a fundamental and valued archaeological skill because stone artifacts are abundant in the prehistoric archaeological record, and frequently the only preserved materials. This course uses reading/discussion and hands-on experience to introduce you to different types of lithic artifacts and technologies and the different types of information that stone tools can provide. In this class you will: 1) learn to identify various kinds of prehistoric flaked and ground stone artifacts; 2) become proficient in fundamental lithic artifact processing, classification, and analytical skills; and 3) explore how lithic analysis can be used to investigate and understand the past.

**Course Format**

The course format emphasizes reading/discussion and lab time handling artifacts. Some class meetings will be more lecture-oriented, but the nature of the course demands your active and regular participation to develop basic skills and understanding. The texts and additional readings introduce you to various methodological techniques and theoretical ideas for interpreting stone artifacts and the sites in which they occur, such as stone tool manufacture, use wear analysis, design theory, and experimental archaeology. We also examine how archaeologists have used stone artifacts to examine issues related to human evolution, gender, religion, and settlement pattern change. You will have the opportunity to explore your own interests within lithic analysis by creating an annotated bibliography.

**It is vital that you understand that there is a significant hands-on component to the class.** Throughout the semester we will be working with archaeological collections, including doing classification and analysis of materials from the Pine Lake archaeological site in West Davenport, NY. There are also three short assignments that involve doing specific kinds of artifact analysis. **Successful completion of these tasks will require you put in additional lab time outside of class meetings.**

**Course Attributes:**

ANTH 294-81 counts toward Liberal Arts credit in general education requirements. Anthropology minors: This course counts toward Anthropology course credit requirements. Anthropology majors: This course may be used to fulfill the "Methods/Experience" requirement by filing the appropriate paperwork (substitution waiver) with approval of the Department Chair.

**Required Reading:**

**A) Textbooks:** This course has two required texts:

- 1) Andrefsky, Jr. William. 2005. *Lithics: Macroscopic Approaches to Analysis, 2<sup>nd</sup> edition*. Cambridge University Press, Cambridge, UK.
- 2) Adams, Jenny L. 2002. *Ground Stone Analysis: A Technological Approach*. University of Utah Press, Salt Lake City, UT.

**B) Additional required readings:** There are additional required readings not found in either textbook. These will be available either as hardcopies handed out in class or as pdf files posted on Angel. Most of these are fully referenced elsewhere in the syllabus. However, additional readings will be added.

**Recommended (optional) Reading:**

- 3) Whittaker, John C. 1994. *Flintknapping: Making and Understanding Stone Tools*. University of Texas Press, Austin, TX.
  - This is a very good introduction to how to make stone tools. If you are interested in doing so, I highly recommend it.

**Course Requirements.**

Your final grade will be based on meeting **all** of the course requirements; failure to meet any one of them can result in a failing grade. You should note that there is **no extra credit**, or make-up assignments or exams. Your overall course grades will be based on total cumulative points, broken down approximately as follows:

Course Requirements	Points	% of Course Grade
Class Participation	5	5%
Assign #1	5	5%
Assign #2	8	8%
Assign #3	10	10%
Annotated Bibliography	16	16%
Exam: Flaked Stone	20	20%
Exam: Ground Stone	16	16%
Pine Lake Analysis	20	20%

100%

Grade by Total % of Points Earned:		
A 93-100%	A- 90-92%	
B+ 87-89%	B 84-86%	B- 80-83%
C+ 77-79%	C 74-76%	C- 70-73%
D+ 67-69%	D 64-66%	D- 60-63%
F below 60%		

**Class Participation.** You are to read the assigned materials according to the course schedule and actively contribute to class discussion. For each class, you will be assigned either + or – for your participation in class discussion. Participation is based on your contribution over the course of the semester.

**Assignments.** There are three take-home assignments that combine practical skills and writing tasks. This first involves drawing flakes and explaining their variation. The second entails distinguishing “geofacts” from artifacts. The third focuses on projectile point analysis. Assignments will be graded on comprehension, clarity, and writing quality.

**Annotated Bibliography.** You can pursue your own interests by compiling an annotated bibliography on a lithics-related topic of your choice. Written content must include: a) an introductory topic statement (paragraph); b) three long (1.5-2 p) article write ups; and c) three short (1 paragraph) article write-ups. All readings must be properly referenced (format to be specified). **ALL TOPICS AND READINGS FOR THE BIBLIOGRAPHY MUST BE PRE-APPROVED BY PROFESSOR KLINK.**

**Exams.** There are two in-class exams, which emphasize hands-on artifact analysis and identification.

**Pine Lake Artifact Analysis.** This semester-long project involves classifying and analyzing archaeological material from the Pine Lake site. You will be responsible for accurately analyzing a portion of the lithic artifacts, following the Pine Lake analysis system (manual given in class). I will be monitoring your development throughout the semester, and your skill should improve over time. Your grade for this project will be based on my evaluation of your accuracy rate on a sample of the artifacts that you analyze in the latter half of the course.

### **Course Policies**

**Attendance.** Attendance will be taken every day and is critical to achieving a good grade. In addition, I will consider attendance in resolving borderline grades. Students who do not attend class on a regular basis will be involuntarily withdrawn. Absences due to illness or personal/family problems may be excused, with appropriate documentation, but you are still responsible for the material that was covered.

**In the event that a class cannot be held as scheduled** (for example, due to closure of campus because of inclement weather), **that class meeting will be rescheduled for another day at roughly the same time and you will be expected to attend. Be prepared for this!**

**Writing and Late Policies.** For all written tasks (assignments, annotated bibliography):

- I do not accept work that contains excessive (7-10) spelling, grammar, capitalization or punctuation errors per page, as these are incredibly difficult to read and properly evaluate.
- Writing quality (grammar, clarity, style, etc.) affects your grade.
- Late submissions will be downgraded. Anything more than a week late will not be accepted and automatically graded as an F/0 points.

**Academic Honesty.** It is your responsibility to know SUCO's rules on academic honesty (see Code of Student Conduct @ <http://www.oneonta.edu/development/judicial/code.asp#conduct>). I will not accept ignorance of the policy as an excuse for breaking it. Any student found cheating will receive a failing grade and may be reported to the Student Conduct Committee for possible further action consistent with College policy, including possible dismissal from the College.

**Angel.** Announcements and class-related materials (pdfs of articles, handouts, etc.) will be posted via Angel (<http://angel.oneonta.edu>). It is your responsibility to check Angel regularly for announcements. You need to be officially registered in the class to access to course content on Angel. If you have problems with any aspects of Angel contact the Information Technology Help Desk (607) 436-4567.

**Disability Needs.** You must inform me if you require special considerations, either in-class or for exams, due to disability (learning, physical, etc.). Your needs will be accommodated to the extent possible following SUCO policies.

**All material in this syllabus is subject to change at my discretion.**

**Additional Required Readings (full references): (more TBD)**

- 1) Odell, George. 2004. Ch. 3 Tool manufacture, pp. 53-74. In: *Lithic Analysis*, by George Odell. Kluwer Academic/Plenum Publishers, New York, NY.
- 2) Luedtke, B.E. 1992. Altered Cherts. In: *An archaeologists Guide to Chert and Flint*, by B.E. Luedtke, pp. 99-112. Archaeological Research Tools 7, Institute of Archaeology, University of California, Los Angeles.
- 3) Whittaker, John C. Ch 3: A brief history of flintknapping, pp 23-63. In *Flintknapping: Making and Understanding Stone Tools*, by John Whittaker. University of Texas Press, Austin, TX.
- 4) Peacock, Evan. 1991. Distinguishing between artifacts and geofacts: a test case from Eastern England. *Journal of Field Archaeology*, 18(3): 345-361.
- 5) Klink, Cynthia. 2007. The lithic assemblage. In: *Kasapata and the Archaic Period of the Cusco Valley*, edited by Brian Bauer, pp. 31-77. Monograph 57, Cotsen Institute of Archaeology, University of California, Los Angeles.
- 6) Odell, George and Frank Cowan. 1986. Experiments with spears and arrows on animal targets. *Journal of Field Archaeology* 13(2):195-212.
- 7) Deller, Brian and Ellis, Christopher. 2001. Evidence for late Paleoindian ritual from the Caradoc site (AfHj-104), southwestern Ontario, Canada. *American Antiquity* 66(2):267-284.
- 8) McGuire, Kelly and William Hildebrandt, 1994. The possibilities of men and women: gender and the California Milling Stone Horizon. *Journal of California and Great Basin Anthropology* 16(1):41-59.

**Course Schedule**

<b>Date</b>	<b>Readings (read before class)</b>	<b>Other - Assigns/exams. Etc.</b>
22-Jan	1) Andrefsky Ch 1 & 2) Adams Ch 1.	
29-Jan	1) Andrefsky Ch 2 & 2) Odell 2004 p 53-74.	Get Assignment 1.
5-Feb	1) Andrefsky Ch 3 & 2) Luedtke 1992.	
12-Feb	1) Whittaker 1994 Ch 3 (History of Flintknapping) & 2) Peacock 1991.	1) Assign 1 due & 2) Get Assignment 2.
19-Feb	No Class - Break	
26-Feb	Andrefsky Chs 5 & 6.	
4-Mar	1) Andrefsky Ch 7, pp. 143-194 (Approaches to Stone Tool Analysis) & 2) Klink 2007 (part 1)	Assignment 2 due.
11-Mar	1) Andrefsky Ch 7, pp. 195-200 (Tool function) & Ch 8 pp. 201-210 (tool functions sections) & 2) TBD	
18-Mar	1) Odell and Cowan 1986 & 2) TBD	Get Assignment 3.
25-Mar	No Class - Break	
1-Apr	1) Andrefsky Ch 8 pp 210-223 & 2) Deller and Ellis 2001.	
8-Apr	1) Andrefsky Ch 9 & 2) Klink 2007 (part 2).	Assignment 3 due.
15-May	Adams Ch 2 & 3	Flaked Stone Exam.
22-Apr	1) Adams Ch 5 and 11; & 2) McGuire and Hildebrandt 1994.	
29-Apr	Adams Ch 4, 6, 7, 8	
6-May	Adams Ch 9, 10, 12	1) Pine Lake Artifacts due and 2) Annotated Bibliography due.
13-May	Final Exam Time Slot	1) Ground Stone Exam and 2) Discuss Annotated Bibliographies