Class Description

Confronted with a jumble of broken stones, bones or ceramic vessels, how does the archaeologist begin in reconstructing behavior and culture? This graduate seminar develops the idea of technological life history analysis as one robust approach to analyzing archaeological data and developing low-level behavioral and cultural inferences. The focus of this seminar will be on lithic technologies. It therefore will offer archaeologists with diverse backgrounds a comprehensive view of this important category of material culture. The inferential tools honed in this class also will be applicable to a wide array of material types including ceramics, metals and even architecture.

Class Requirements

The class meets from 2-4:50 every Monday during which time individuals will lead discussion of readings assigned for that week. Discussion leaders are expected to produce a 1-2 page handout summarizing the main issues in their assigned article and several talking points that we will debate. Twenty percent of your grade will be based on these in-class activities.

The remainder of your grade will be based on a 15 page research paper developing a life history analysis of a technology of their choice. This assignment is very flexible and therefore may be formulated and executed in a way that is most useful to your own research. You should set as your goal the production of a publishable quality paper or dissertation chapter.
Lecture Topics & Readings

**Week 1: Introduction, Life History Analysis & Lithic Technological Organization**

Nelson, M. C.  

Binford, L. R.  

Bamforth, D. B. and P. Bleed  

**Week 2: Stone Raw Material Properties, Fracture Mechanics & Design Basics**

Luedtke, B. E.  

Cotterell, B. and J. Kamminga  

Pelcin, A. W.  

**Week 3: Stone Procurement & Transport**

Andrefsky, W. J., Jr.  

Bamforth, D. B.  


**Additional Sources**
Brantingham, P. J.  

**Week 4: Manufacturing I: Oldowan & Biface Core Technologies**

Potts, R.  

Kelly, R. L.  

McPherron, S. P.  

**Additional Sources**

Shott, M. J.  

Sullivan, A. P. and K. C. Rozen  

Ahler, S. A.  

**Week 5: Manufacturing II: Levallois & Blade Core Technologies (Chaînes Opératoires)**

Audouze, F.  

Boëda, E.  

Bar-Yosef, O. and S. L. Kuhn
Week 6: Manufacturing III: Retouched Tool Technologies

Bisson, M. S.

Dibble, H. L.

Flenniken, J. J. and P. J. Wilke

Additional Sources

Marks, A. E., H. J. Hietala and J. K. Williams

Bettinger, R. L., J. F. Oconnell and D. H. Thomas

Week 7: Use I: Tool Form-Function & Use Wear Analysis

Newcomer, M., R. Grace and R. Ungerhamilton

Bamforth, D. B.

Dockall, J. E.

**Additional Sources**

Keeley, L. H.  

**Week 8: Use II: Inter- & Intra-assemblage variability**

Grayson, D. K. and S. C. Cole  

Hiscock, P. and V. Attenbrow  

Bodu, P., C. Karlin, and S. Ploux.  

**Additional Sources**

Brantingham, P. J., K. W. Kerry, A. I. Krivoshapkin and Y. V. Kuzmin  

**Week 9: Recycling, Maintenance & Discard**

Kuhn, S. L.  

Shott, M. J.  

Surovell, T. A.  
Additional Sources

Bamforth, D. B. and M. S. Becker

Week 10: NO CLASS—WORK ON PAPERS