**AHS 2103 Lithic Analysis in Archaeology**

**Course objectives**: The major goal of this course is to provide students with critical skills in analyzing, processing and managing archaeological materials and data interpreting or explaining the past.

**Course Description**

The course will address both theoretical and practical aspects of analyzing, processing, and managing the objects of the past material cultures. In particular, the course will focus on stone artifact attribute, identification and analysis, classification, technology and raw material analysis, tool use and ware and implications for archaeological interpretations. The course will provide both lectures and practical laboratory experiences.

**Assessment:** 30% Course Work; 70% Examination

**Course Outline**

Topic1: types and Properties of Lithic Raw Materials

* 1. Cryptocrystalline rocks
  2. Amorphous rocks
  3. Conchoidal fracture
  4. Quartz
  5. Quartzite
  6. Chert
  7. Basalt
  8. Obsidian
  9. Phonolite, etc

Topic 2: Lithic Technology and Typology

2.1 Flakes, cores, shaped tools, angular waste, manuports, etc.

2.2 Flake termination

2.3 Categories of modification

Topic 3: Techniques of Stone Artifact Manufacture

3.1 Percussion flaking-hard hammer

3.2 Percussion flaking-block on block

3.3 Percussion flaking-bipolar technique

3.3 Percussion flaking-soft hammer

3.5 Percussion flaking-indirect/punch technique

Topic 4: Experimental Replication

4.1 Manufacture of stone artifacts and tools-practical

Topic 5: Lithic Attribute analysis

5.1 Definition of attributes

5.2 Sorting of artifacts into major categories

5.3 Laboratory practical analysis of stone artifacts

Topic 6: Lithic Illustration

6.1 Principles and techniques of drawing artifacts

6.2 Practical drawing of stone artifacts

Topic 7: Data Processing and Entry

7.1 Data processing

7.2 Entering data into a computer

Topic 8: Statistical Analysis

8.1 Computer data manipulation

8.2 Statistical analysis

Topic 9: Archaeological Interpretations

9.1 Making sense about the prehistoric people

9.2 Making sense about past life ways

**Basic readings**

Clark, J.D. 1974. *KalamboFalls Prehistoric Site.* Cambridge: Cambridge University Press

Feblot, A. 1999.*Technology and Terminology of Knapped Stone.* Nanterre: Crep

Hellwege, P. 1984. *Flint-Knapping: The Art of Making Stone Tools.* Canyon Publishing Company.

Kuhn, S. L. 1995. *Mousterian LithicTechnology: An Ecological Perspective.* Princeton: PrincetonUniversity Press.

Leakey, M. D. 1971.  *Olduvai Gorge* III*.* Cambridge: CambridgeUniversity Press

Whitaker, J. C. 1994. Flint-knapping: Making and Understanding Stone Tools.Austin: University of Texas Press.