Course Objective: This course is designed to introduce students to flaked stone technology and analysis. The overall goal is for students to learn how to make, identify, classify and analyze flaked stone artifacts to the extent that they feel comfortable working with stone artifact collections in research and CRM settings. We will also consider, albeit in less detail, theoretical and methodological approaches to interpreting human behavior from stone artifacts. Students are encouraged to work with their own data sets if they have one.

Prerequisites
You are expected to have taken a course equivalent to ANT 2000 (General Anthropology), and/or ANT 2140 (World Archaeology), and/or another Upper Division archaeology course. If you have not had at least one of these courses, you can still take the course. But I strongly advise you to read at least one introductory archaeology text in method and theory (e.g. Thomas, D.H. and R. Kelly 2011. Archaeology: Down to Earth. 3rd Edition. NY. Cengage) as I will expect you to be familiar with the basics of archaeological method and theory and world archaeology. Some knowledge of basic statistics and the ability to use Microsoft Excel is also recommended, but not required.

Class Meetings: B357 Turlington Hall
- Tuesdays 9:35-12:30 pm (Per. 3-5), B357 Turlington Hall

Office Hours and Communication
- Office hours: B368 Turlington Hall, Tuesday and Thursday 1-3 pm (or by appointment).
- Telephone: Office: (352) 294-7599
- E-mail: sbrandt@ufl.edu
- Lectures, Assignments, Study Guides and other PDF’s will be posted to E-Learning (Canvas)
- Web page: TBA

Required Text

Required Readings
- PDF’s of selected book chapters and journal articles

Required Viewings:
- Occasional videos from YouTube and other sources

Recommended Books
**Recommended Journals Focused Specifically Upon Lithics**

- *Lithic Technology* (UF Library)

**Web Sources (more to be added)**
- The “Lithic Site” Web Page: [http://wings.buffalo.edu/anthropology/Lithics](http://wings.buffalo.edu/anthropology/Lithics)

**Equipment and Supplies:** I am requesting that each student contribute $20-25 toward the purchase of obsidian raw material, plastic bags, marking pens, gloves, safety goggles and other misc. items, to be collected by Week 4 of classes (provided free of charge: some raw materials, pads, hammerstones and billets, band aids, calipers, goniameters)

**Examinations and Grading**

**Undergraduates:** Grades will be based on: 1) three non-cumulative exams (identification of artifacts and their characteristics, short answers and mini essays) worth a total of 140 points; and 2) three sorting assignments@ 20 points each;

**Graduates:** Grades will be based on: 1) two non-cumulative exams (identification of artifacts and their characteristics, short answers and mini essays) each worth 50 points; 2) three sorting assignments@ 20 points each; 3) Summary notes on the readings for Weeks 13-16 @ 10 points each, and 4) a research project and report based on analysis of an actual archaeological collection @ 100 points.

Your grade will be based on the total accumulation of points, as follows:

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<thead>
<tr>
<th></th>
<th>Undergraduates</th>
<th>Grads</th>
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<tbody>
<tr>
<td>First Exam</td>
<td>50</td>
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<td>Second Exam</td>
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<td>Third Exam (Undergrads Only):</td>
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<td>Sorting Assignments: 3@ 20</td>
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<td>60</td>
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<tr>
<td><strong>Total Points</strong></td>
<td><strong>200</strong></td>
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<tr>
<td>Week 13-16 Reading Notes @ 10 pts each</td>
<td></td>
<td>40</td>
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<tr>
<td>Research Project and Report</td>
<td></td>
<td>100</td>
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<tr>
<td><strong>Total Points</strong></td>
<td><strong>300</strong></td>
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**Grades:**

- A: 94-100%
- A -: 90-93
- B+: 87-89
- B: 84-86
- B -: 80-83
- C+: 77-79
- C: 74-76
- C -: 70-73
- D+: 65-69
- D: 60-63
- E: <60%

**Undergrad Research Paper Option:** Students have the option of substituting a ~5-10 page research paper for either the first or second exam (but NOT the third). The topic must be cleared by the professor at least three weeks prior to the end of the semester.
Attendance: Attendance is mandatory. Failure to attend lectures without an official excuse (see below) will result in the loss of points, as follows:

- 1 missed 0 points subtracted from total points
- 2 missed 30 points subtracted from total points
- 3rd missed 60 points subtracted from total points
- 4th missed Automatic E for the course

Official UF, Medical Or Religious Absences And Make-Up Exams

Except for medical/disability reasons, religious reasons or official university business, there will be no makeup exams or excused absences. A letter signed by a physician or a university official must be obtained before a makeup exam will be scheduled or an absence excused. Likewise, any religious reason for missing an exam or section must also be discussed with the professor and/or TA before a makeup exam will be scheduled or an absence excused. If you have a disability that could affect your class performance, please discuss this with the professor or TA during the first week of class.

Cheating: Needless to say, cheating in any way will not be tolerated and will result in a 0 exam score and/or possible dismissal from the course.

Cell Phones can only be used before, during a break, or after lab. Phones must also be turned off or silenced once we reach the knapping area (but you can use your phones while walking to the knapping area and when the knapping session is over. Phones must be turned off or silenced during class time. More than two warnings on this will result in an automatic E.

Laptops and Tablets can be used freely before, during a break, and after class. During class, they must only be used for taking class notes or direct class-related activities (e.g. assignments, data entry or projects). More than two warnings on this will result in an automatic E.
WEEKLY SCHEDULE OF LECTURES AND READINGS (Subject to Modification)

Week 1: 8/23  Introduction and Course Requirements; Why and How to Study Flaked Stone Artifacts (Lithics); Fracture Mechanics and Raw Materials; Direct Percussion; Film: The Cutting Edge.
  •  Practice.

Readings
  •  Everyone: Record: Ch 1 – Studying Stone Artifacts
  •  Flintknapping Ch 6 – Hard Hammer Percussion

Week 2: 8/30  What is Up, What is Down, What is Left, What is Right? Orienting and Describing Lithics;
  •  Knapping Practice: Freehand Hard-Hammer Direct Percussion; Anvil and Bipolar Knapping

Readings
  •  Everyone: Record: Ch 3,5,
  •  Grads: Lithics Ch 4 – Getting Started in Lithics

Week 3: 9/6  Description, Classification and Typology.
  •  Laboratory description and classification of your Week 2 assemblages: Mode 1 Technologies and Oldowan assemblages
  •  Knapping Practice (if time permits): Freehand Hard-Hammer Direct Percussion and Anvil/Bipolar Replication of Mode 1/Oldowan Cores, Debitage and Tools

Readings (over the next two weeks)
  •  Everyone (in this order):
    o  Record Ch. 4 and Ch 6

  •  Grads: Lithics Ch 5

**Assignment 1 (30 pts): Sorting and description of your own Week 2, Week 3 (if any) and Week 4 assemblages (see handout distributed during class). Due by beginning of class, Tuesday, 9/20

Week 4: 9/13  Description, Classification and Typology Continued.
  •  Mode 2 Technologies and Acheulian assemblages
  •  Knapping Practice: Freehand Hard-Hammer, Soft-Hammer and Anvil/Bipolar Direct Percussion; Replication of Mode 2/Acheulian Cores, Debitage and Bifacial Tools
  •  Practice making Mode 2/Acheulian Cores, Debitage and Bifacial Tools
  •  Laboratory sorting, classification and description in class

Readings

Week 5: 9/20** Assignment 1 uploaded to Canvas no later than the beginning of class.
Prepared Cores (e.g. Levallois, Disc) and Flake Tools; Typology: The Mousterian and South African Stillbay;
Practice knapping of prepared cores and other Mousterian material
Exam1 Review- Questions and Answers; Study Guide

Readings

  Selected translations and illustrations
- S. Brandt’s Ethiopian Typology

**Assignment 2:** *Laboratory sorting, description and attribute analysis of your own Week 4 and 5 assemblages (see handout). To be uploaded to Canvas no later than the beginning of class, Tuesday, 10/4*

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**Week 6: 9/27 FIRST EXAM: Covers Everything Through Week 5 (50 points)**

- PART 1 Description and Classification of 5 Artifacts (25 pts)
- PART 2: Short answers and one or two mini-essays (25 points)

**Week 7: 10/4  **

**Assignment 2 uploaded to Canvas no later than the beginning of class.**

Return First Exam; Attribute Analysis and Measurement;

- Practice knapping of prepared cores and other Mousterian material

**Readings**

**Week 8: 10/11 Attribute Analysis and Measurements; Illustration**

Practice attribute analysis in class using your own assemblages from Weeks 6, 7 and earlier.

**Readings:**

**Assignment 3:** *Laboratory sorting, description and attribute analysis of your own Weeks 7 and 8 assemblages (see handout). To be uploaded to Canvas no later than the beginning of class, Tuesday, 11/1*

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**Week 9: 10/18 Composite Tools; Blade Core and Tool Technology; Backing;**

- Practice making blade cores, blades, burins, backed tools and other Old World Late Pleistocene Technologies
- Pressure Flaking and Thermal Alteration

**Readings:**

**Week 10: 10/25 Pre-Paleoindian, Paleoindian and Archaic Technologies of the Americas.**

- Practice making Paleoindian and Archaic Tools
- Practice Throwing Spears and Atlatls (Location TBD)

**Readings**

**Week 11: 11/1 Assignment 3 To be uploaded to Canvas no later than the beginning of class, Lithic Technology of Neolithic/Bronze Age/Iron Age/Woodland/Maya/Mississipian/Contact and Contemporary Societies; The End of the “Stone Age”.

- Grad Students: Discussion of Projects

**Readings**
Week 12: 11/8 Second Exam (covers everything from Weeks 7 through 11).
   Part 1: Identification and Description of 5 artifacts (5 x 5=25 points).
   Part 2: Short Answers; Mini-Essays (25 pts).
      • Grad Students work on projects

Week 13: 11/15 Return Second Exam; Determination of Lithic Functions: Analogy; Experimentation; Ethnoarchaeology; Use-wear/Micro-wear; Residue/Chemical Analyses
      • Conduct Use-wear experiments
   Readings: (Grads Prepare, Use and Turn in Summary Notes)

Week 14: 11/22 Explaining Artifact Variability: Developing Culture-Histories; Culture-Process
      • Technological Organization
      • Life Cycles; Reduction Systems and Chaine Operatoire
   Readings: (Grads Prepare, Use and Turn in Summary Notes)

Week 15: 11/29 Explaining Artifact Variability: Style and Function; Spatial Organization
      • Bordes/Binford Debate and Beyond
      • Raw Material Sourcing; Using a pXRF
   Readings: (Grads Prepare, Use and Turn in Summary Notes)
   Record: Ch 2:44-92.

Week 16: 12/6 Post-Processual Perspectives; Lithics in Cultural Heritage/Resource Management
      • Agency, Memory, Materiality, etc.
   Readings: (Grads Prepare, Use and Turn in Summary Notes)

**Grad Students Turn in Project and Paper**