



Dr. Andy Creekmore

Email: [andrew.creekmore@unco.edu](mailto:andrew.creekmore@unco.edu)

Office: Candelaria 2032; tel. 351 2761

Office Hours: TTh 10:45-11:45, 1-2, 3:15-4

### Course Description

Most of what we know about prehistory derives from archaeological research, and much of written history is supplemented, derived from, or even contradicted by archaeological research. Archaeology is thus an essential field for anthropology, history, and other subjects with which it intersects. This class introduces the history, theories, laboratory and field methods of archaeology, focusing especially on methods. We will cover many techniques including fieldwork such as surface survey, excavation, and geophysics, and lab methods including analysis of bone, ceramic, lithic and other materials. As we study these methods we will review archaeological theories and principles related to interpreting the material remains that make up our data.

**Note:** this course requires weekly activities that sometimes take place outdoors at an alternative location on or off campus. You should be prepared to participate in all contexts.

### Learning Objectives

In this course students will:

- Apply archaeological methods to the study of stone tools, ceramics, animal bone, and human bone.
- Apply archaeological methods to pedestrian survey, geophysics survey, and excavation in limited excursions.
- Describe and justify which field and lab methods to use in a range of research scenarios.
- Interpret human behavior on the basis of artifacts and features recovered from archaeological sites.
- Use introductory flintknapping techniques to produce a stone tool.
- Identify and distinguish the major dating or chronological methods used in archaeology, and explain under what circumstances and with what type of material each method is useful.
- Identify and distinguish the major theoretical paradigms of archaeology and how these affect research choices and interpretive frameworks.
- Complete labs and projects that require analysis and interpretation of archaeological materials.
- Demonstrate teamwork skills in the context of small group projects and weekly partnering in lab activities.

### Instructional Methodology

This course consists of in-class and video lectures combined with in-class, outdoor, and at-home activities, readings, and videos that explore archaeological methods. We use the Canvas online portal <http://unco.instructure.com/> for all course content and submitting assignments, and communication. If you need assistance with Canvas, contact the Technical Support Center at <http://www.unco.edu/canvas/student-support/> or call (970) 351 – 4357 or 1-800-545-2331 (M-Th 7am – midnight; F 7am-5pm; SS noon to 7pm).

### Instructor-Student Communication

Students should not hesitate to contact me with any questions, comments, or concerns. I may be reached at the email address, phone and office above. If my office hours conflict with your schedule then you should contact me to schedule an appointment. Grades, announcements, and assignment guidelines will be posted to **Canvas**.

(<http://unco.instructure.com/>) Please check Canvas and your UNC email regularly.

## Students With Disabilities

Any student requesting disability accommodation for this class must inform the instructor by giving appropriate notice. Students are required to contact Disability Support Services at (970) 351-2289 to certify documentation of disability and to ensure that appropriate accommodations are implemented in a timely manner.

## Course Policies

- Make-up exams are given only when true emergencies occur, and only with proper documentation, such as a doctor's note. If you find yourself in such a situation please contact the Professor before the exam if at all possible. **DO NOT SCHEDULE VACATIONS OR OTHER TRIPS DURING EXAMS AND ASSIGNMENTS AS THESE DO NOT CONSTITUTE AN ACCEPTABLE CONFLICT, AND A MAKE-UP WILL NOT BE ALLOWED. THE FINAL EXAM IS OFFERED ONLY ON THE DATE AND TIME ASSIGNED TO THIS COURSE BY THE UNIVERSITY.**
- Students who add the course late are expected to contact the professor immediately and complete any missed assignments within 1 week of adding the course.
- Late work is NOT accepted.
- There is NO extra credit.
- The use of electronic equipment in class, including cell phones, music players, laptops, etc., is prohibited unless special permission is granted by the Professor for note taking or an activity. *Failure to adhere to this policy will result in a reduction of your grade.*

## Academic Misconduct:

Cheating, plagiarism, forgery, and all other forms of academic misconduct are unacceptable in this course, and at UNC. Please familiarize yourself with the UNC Student Code of Conduct: <http://www.unco.edu/dos/Conduct/codeofconduct.html> Lack of knowledge of these requirements will not be viewed as an excuse for noncompliance. Cheating, plagiarism, or forgery will result in a zero for that assignment. Please especially avoid plagiarism in composing your written assignments. To plagiarize is to present the words or ideas of some else as if they were your own, but can also include turning in the same paper or work, even if is your own, in multiple classes. In other words, if you are cutting and pasting from any source, reusing material from another class, or closely following the format/content of another paper, you must cite the source in every instance. This includes websites, books, unpublished papers, lectures, etc. Penalties for plagiarism range from a failing grade on the assignment or course to more comprehensive University disciplinary action. For more information on this topic and university policies, consult this website and the brief powerpoint presentations posted there: <http://www.unco.edu/english/wcenter/academicintegrityindex.html>

## Evaluation

Your grade is determined by weighted categories as follows:

- 40% Exams (Midterm 20%, Final Exam 20%). Make-up exams will be given at the instructor's discretion. If an exam is missed due to unforeseen circumstances such as illness or family emergency, arrangements will be made so no penalty is imposed, but **only if the legitimacy of the absence is adequately documented** (doctor's excuse, accident report, etc.) **AND the instructor is contacted within 24 hours of the examination date.** All make-up exams must be taken within one week after the exam. Otherwise, the student will receive a "0" for that exam.
- 15% Online (canvas) quizzes. Must be completed by 1pm on Tuesday for each week that a quiz is assigned. Open book and note but timed so you must be prepared.
- 35% Activities / labs. There will be many labs, some in class and some take-home. Some labs will be started in class and finished at home. Some labs will be completed in groups or pairs, and others will be completed solo. If you have an unexcused absence on the day that we complete an in-class lab you **cannot** make up the lab. **NOTE: Special labs or projects may be weighted greater than individual labs. That is, a special project may count the same as 2 or more labs when grades are determined. If so, this will be explained in the assignment.**
- 10% Participation and citizenship. Although one must be present to participate, this grade is not based solely on attendance. It includes enthusiastic, engaged participation in class activities and discussion. This grade will drop in cases of poor citizenship, including texting or fiddling with electronic devices, arriving late or leaving early without giving prior notice and explanation, lackadaisical or unengaged completion of activities, or failure to fulfill obligations to your peers on group assignments.

## Grading Scale (Note: Final grades are *not* negotiable).

<u>Percentage</u>	<u>Letter Grade</u>	<u>Quality Points</u>
93-100	A	4.000
90-92	A-	3.667
88-89	B+	3.334
83-87	B	3.000
80-82	B-	2.667
78-79	C+	2.334
73-77	C	2.000
70-72	C-	1.667
68-69	D+	1.334
63-67	D	1.000
60-62	D-	0.667
0-59	F	0.000

## Required Readings

- 1) Textbook: Archaeology Down to Earth by Robert L. Kelly and David Hurst Thomas, 7th Edition.
- 2) Readings posted to Canvas (<http://unco.instructure.com/>)
- 3) During some weeks your reading load will be light, for others it will be heavier. Be sure to look ahead on the syllabus periodically so you can manage your preparation time effectively.

### Dates of special significance, including exam and assignment due dates.

- February 28: Midterm.
- March 11-19: Spring break.
- Final Exam: **Friday May 5, 10:45-1:15, in usual classroom.**

### Assignments guidelines

- Most weeks we will complete activities in class, but some activities must be finished as homework, or will be assigned as out-of class solo or group activities.
- Most out-of-class, individual assignments will take a few hours to complete. Group activities will take considerably longer. You should coordinate with your group members and get started early on all group projects.
- ***I will not accept late assignments*** – *late material will receive a zero (0) for the assignment.* “Late” means any time after the conclusion of class in which the activity takes place, or the conclusion of class on the due date.
- Some assignments will not be typed, but all typed assignments must be in 12 point New Times Roman Font, double-spaced with 1” margins, unless otherwise noted.
- Activities or assignments that fail to follow instructions will receive a grade of zero.
- Assignments will be graded for quality, (how well they answer the questions posed), completeness (addressing all aspects of the assignment), and integration, when necessary (e.g. paragraphs should be in essay format, not simply a list of answers to questions).
- Group projects or activities will be peer-reviewed. Persons who fail to uphold their obligations to the group will lose points on the assignment and their participation and citizenship grade.
- Missed assignments can only be made up in cases of documented emergencies or approved academic conflicts.
- When noted or announced in class, some assignments must be submitted online via the Safe Assign link on Canvas. In those cases, the online submission is due by the start of class on the due date.

**COURSE SCHEDULE: TOPICS AND READINGS** (Readings not in the textbook are posted to Canvas; refer to Canvas for updates to course content or assignment instructions. Please read the assigned chapter or article **BEFORE** the class date for which it is listed).

**\*\*\*NOTE: The schedule or topic of readings or assignments may change during the course. Be sure to check Canvas each week for announcements of any changes.** KT = Kelly and Thomas

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**WEEK AND TOPIC** **Reading assignment**

**WEEK 1: Jan 10, 12** Introduction to the course. Introduction to materials. History of archaeology.

Reading:

- KT Ch 1

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**WEEK 2: Jan 17, 19** The Structure of archaeological inquiry

Reading:

- KT Ch 2

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs: 1) Developing a hypothesis and associated research design.

2) Devise a research design for a survey of the Michener – Candelaria lawn.

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**WEEK 3: Jan 24, 26** Stone tool analysis and flintknapping

Readings:

- Price 2007: 271-292.
- KT pp. 157-160.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs: 1) Flintknapping. 2) Stone tool sorting. 3) Interpreting behavior from stone tool data.

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**WEEK 4: Jan 31, Feb 2** Using GPS in archaeological research

Readings:

- National Geographic Map Skills Booklet.
- GPS documentation about Terrasync, etc.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Lab: Using GPS units to locate points, record points, record paths and areas.

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**WEEK 5: Feb 7, 9** Fieldwork: survey

Readings:

- KT Ch 3
- Also browse the Kansas Historical Society's SHPO guide to archaeological survey.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs: 1) Field survey. 2) Sampling strategies.

➔ DRESS FOR OUTDOORS

➔ Heads up: Geophysics questions due NEXT week.

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**WEEK 6: Feb 14, 16** Archaeogeophysics.

Readings:

- KT Ch 3: 54-60; AND additional article assigned to groups by last name – see Geophysics assignment posted to canvas / course materials / activities. (Conyers, Somers, or Kvamme).

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs:

1) Hand in Responses to Geophysics reading questions (posted to canvas). 2) Field demo of GPR.

3) Geophysics scenarios.

➔ DRESS FOR OUTDOORS

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**WEEK 7: Feb 21, 23** Photogrammetry

Readings:

- Porter, Roussel, and Soressi 2016.
- Remondino 2011.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Lab: Photogrammetry set-up and data processing.

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**WEEK 8: Feb 28, March 2** MIDTERM

**Tuesday: MIDTERM**

Covers lectures, readings, and activities assigned to date; includes a materials identification and analysis section.

Thursday: TBA

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**WEEK 9: March 7, 9** Ceramic analysis

Reading:

- Price Ch.11 pp. 297-318.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs: 1) Ceramic sorting. 2) Interpreting behavior from ceramic data.

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**March 11-19 SPRING BREAK, NO CLASS**

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**WEEK 10: March 21, 23** Geoarchaeology and site formation processes

Readings:

- KT Ch 5

Canvas Video and Quiz: Complete by 1pm Tuesday.

Lab: 1) Stratigraphy.

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**WEEK 11: March 28, 30** Fieldwork: excavation

Readings:

- KT Ch 4
- Review Thomas and Freidenburg 1997:11-28. Review Brauner 1997: 14-17.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Saturday April 1: field excavation lab at Poudre Learning Center \* **Date to be confirmed.**

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**WEEK 12: April 4, 6** Chronology

Readings:

- KT Ch 6.
- Kutschera n.d.:1-9.
- Skim WSU Museum of Anthropology n.d. Marmes Rockshelter, Appendix Q

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs: 1) Dating scenarios. 2) Seriation.

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**WEEK 13: April 11, 13** Archaeozoology and archaeobotany

Reading:

- KT CH 9

Canvas Video and Quiz: Complete by 1pm Tuesday.

Labs: 1) Flotation. 2) Interpreting human behavior from faunal and botanical remains.

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**WEEK 14: April 18, 20** Bioarchaeology, Taphonomy, experimental archaeology, ethnoarchaeology

**Tuesday:** Bioarchaeology

Readings:

- KT Ch 10

Canvas Video and Quiz: Complete by 1pm Tuesday.

Lab: The basics of studying the human skeleton.

**Thursday:** Taphonomy, experimental archaeology, ethnoarchaeology

Readings:

- KT Ch 8.
- Greenfield 2006: 147-163.

Canvas Video and Quiz: Complete by 1pm Tuesday.

Lab: Ethnoarchaeology. Hand in responses to the film questions. Group discussion and ethnoarchaeology research plan.

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**WEEK 15: April 25, 27** Putting it all together.

Watch this film, available via streaming video on the Michener Library database at this link:

<http://0-anth.alexanderstreet.com.source.unco.edu/view/765136>

***Roots of African Culture*, by Chapman Michael and Tomaselli Keyan (Documentary Educational Resources (DER), 2003) 25 minutes.**

This film includes many topics and methods we studied this semester. As you watch the film, consider: what methods are demonstrated and discussed in the film? How are these methods organized in a progression – which methods much come first and which methods must come later? How do the archaeologists interpret their finds? How does the use of these methods connect to the history of archaeology – how might these methods have developed and built upon one another over time? Be prepared to discuss the film in class.

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**Final Exam: Monday, May 5, 10:45 – 1:15 in usual classroom.**



## Supplementary Readings

Brauner, David R.

1995 *Archaeological Assessment of the 1844 to 1860 Carpenter Shop Site at Fort Vancouver National Historic Site, Clark County, Washington*. Report prepared for the National Park Service.

<http://www.nps.gov/fova/historyculture/upload/Archaeological-1844-to-1860-Carpenter-Shop-Site-Fort-Vancouver-by-David-R-Brauner.pdf> Accessed January 3, 2013.

Conyers, Lawrence B.

2006 Ground-Penetrating Radar. In *Remote Sensing in Archaeology. An Explicitly North American Perspective*, edited by Jay K. Johnson, pp. 131-159. Tuscaloosa: University of Alabama Press.

Greenfield, Haskel J.

2006 Cut Marks on Animal Bones: Diagnostics for Identifying Stone Tool Type and Raw Material. *Journal of Field Archaeology* 31(2): 147-163.

Kansas Historical Society

n.d. SHPO guide to archaeological survey. <http://www.kshs.org/p/shpo-s-guide-to-archeological-survey/15783>. Accessed January 10, 2013

Kutschera, Walter

n.d. 4.4 Radiocarbon dating of the Iceman Ötzi with accelerator mass spectrometry.

<http://www.nupecc.org/iai2001/report/B44.pdf> Accessed January 7, 2013

Kvamme, Kenneth L.

2006 Magnetometry: Nature's Gift to Archaeology. In *Remote Sensing in Archaeology. An Explicitly North American Perspective*, edited by Jay K. Johnson pp. 205-233. Tuscaloosa: University of Alabama Press.

Price, Douglas T.

2007 *Principles of Archaeology*. New York: McGraw-Hill. (excerpt)

Society for American Archaeology.

n.d. SAA Journal Style Guide. <http://saa.org/StyleGuideText/tabid/985/Default.aspx> Accessed January 12, 2013

Somers, Lewis

2006 Resistivity Survey. In *Remote Sensing in Archaeology. An Explicitly North American Perspective*, edited by Jay K. Johnson, pp. 109-129. Tuscaloosa: University of Alabama Press.

Thomas, Bryn, and Linda Freidenburg.

1997 *Carpenter Shop Data Recovery Excavations at Fort Vancouver National Historic Site, Clark County, Washington*. Report prepared for the National Park Service. <http://www.nps.gov/fova/historyculture/upload/Carpenter-Shop-Data-Recovery-Excavation-at-Fort-Vancouver-National-Historic-Site-By-Bryan-Thomas-and-Linda-Freidenburg.pdf> Accessed

January 3, 2013

Washington State University Museum of Anthropology

n.d. Marmes Rockshelter, Appendix Q, Radiocarbon dating reports.

<http://www.archaeology.wsu.edu/county/franklin/45FR50/Appendices/AppendixQ.pdf> Accessed January 10, 2013