





COCHASQUÍ-MOJANDA ARCHAEOLOGICAL PROJECT, ECUADOR

Course ID: ARCH 315M July 15-August 18, 2019

FIELD SCHOOL DIRECTORS:

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INTRODUCTION

Among the most important archaeological sites in northern Ecuador, Cochasquí is also one of the largest earthen mound centers in the Americas. There are 15 large truncated pyramids, some with massive entry ramps up to 300 meters in length. Most of these are thought to have been built after about 1280 A.D., and many, if not all, would have been adorned by large, circular communal structures. An earlier phase at the site, between about 1050 and 1250 A.D., is marked by numerous smaller hemispherical burial mounds. The 1960s German excavators at the site defined two ceramic assemblages associated with these sequential mound construction phases; a third possible phase began with the arrival of the Inka around 1500. After the Spanish conquest in 1534, the site continued to be occupied until

inhabitants were finally reduced to the nearby towns of Tocachi and Malchinguí in 1580 when the site area was incorporated into the Hacienda Cochasquí. Through the years various archaeologists, including German Andeanist Max Uhle in 1932, visited the hacienda and wrote about its visible remains, but the 1960s German excavation was by far the largest. Much of the site area was designated as a regional park in the 1970s, protecting a significant portion of the site's resources including the largest ramped mounds, resources that are quickly disappearing from many other parts of northern Ecuador.

Udo Oberem's 1960s Cochasquí project was one of the largest and most ambitious archaeological projects ever undertaken in Ecuador and the results now define much of northern Ecuadorian highland archaeology. Nonetheless, many questions were left unanswered and new and more complex questions have arisen in the intervening half century. Working in various projects across the northern highlands, our team realized that many of the critical questions facing modern archaeologists might be approached using new archaeological approaches and new technologies. PACM began its quest to re-examine this important site with a series of research questions appropriate to 21st Century archaeological ideas augmented by the latest technology utilizing aerial drones, 3D imagery, digital elevation models, ground penetrating radar, and magnetometry. Today, the Proyecto Arqueológico Cochasquí-Mojanda (PACM) is the most technologically advanced ongoing archaeological project in Ecuador and one of the most advanced in South America.

After several reconnaissance efforts by our team in and around Cochasquí and the Mojanda Lakes area in 2015, PACM began in earnest at the site itself in 2016 with drone aerial mapping, ground penetrating radar survey, Inka road surveys and other reconnaissance trips around the monumental center, as well as excavation units and stratigraphic profiles at various cultural features in the main ramped mound sector. In addition to verifying the nature of onsite subsurface anomalies spotted in the ground penetrating radar subsurface surveys, the limited surface survey work uncovered a new Inka road section and a related small, Inka fortress along the banks of the Pisque River, south of the monumental center. Inka remains observed in the monumental center verified the Inka phase at the site, suggesting that some of the late construction and remodeling at the site may date from that phase.

The 2017 season saw further drone aerial mapping, an extensive magnetometer survey, continued excavations with new units opened in previously unsampled areas, as well as a major effort with excavations and stratigraphic profiling begun in Pyramid G, the site's largest mound. The magnetometer survey revealed dozens of new anomalies, many of which were surprisingly well delineated in the images. Many of these new anomalies, including what appears to be a cluster of buried foundations, possibly a prehispanic or early colonial settlement, will need verification through excavations in coming years.

The brief 2018 season brought an expanded ground penetrating radar survey, confirming and expanding the information available on several previously recorded magnetometer anomalies. Several newly cleared areas were added to the drone map, and some photo-modeling efforts were undertaken at Pyramid G, where continued stratigraphic profiling had revealed a series of constructed floors and walls within the various layers of the pyramid, indicating that it had been built, used, and rebuilt and expanded numerous times over its two centuries or so of existence.

The 2019 field season will focus on excavating concentrations of the possible quotidian structures revealed in remote sensing adjacent to the pyramids. Since much of the archaeological focus at Cochasquí has been placed on the pyramids, little is understood of the domestic lives of the people that built the pyramids. In 2016, PACM identified the first archaeological structure at Cochasquí not located atop a mound or a pyramid. For all that is known about the Integration mounds, we still know next to nothing about the people that built the mounds and their dwellings, a gap in knowledge that is a prime focus in our investigations. Effort in the 2019 field season will also be focused on the largest pyramid on

site where notable coursed masonry style walls constructed with distinctive local materials were discovered by Max Uhle which he identified as evidence of Inka modifications in one of the final phases of pyramid construction. In 2018, PACM uncovered a portion of this same style of construction deeper within the pyramid raising questions about local construction styles and the extent of Inka contributions to the pyramid.

Another area of interest for the 2019 season will be the largest hemispherical mound on site, mound x, where evidence of habitation and feasting has been documented. Hemispherical mounds, which predate pyramid construction, are generally burial mounds. Though there are a few later dates, mound x is unique as much of the structure seems to pre-date the Late Integration ramped mound period. This mound also contains evidence of habitation, rather than burials, and could mark the transition from the hemispherical burial mound tradition to the quadrangular earthen pyramids.

ACADEMIC CREDIT UNITS & TRANSCRIPTS

Credit Units: Attending students will be awarded 8 semester credit units (equivalent to 12 quarter credit units) through our academic partner, Connecticut College. Connecticut College is a private, highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see grading assessment and matrix). This field school provides a minimum of 160 direct instructional hours. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institution prior to attending this field school.

Transcripts: An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One more transcript may be sent to the student home institution at no cost. Additional transcripts may be ordered at any time through the National Student Clearinghouse: http://bit.ly/2hvurkl.

COURSE OBJECTIVES

The field school will introduce students to the basics of archaeological field investigations and provide a general introduction to Andean archaeology and culture history. Participants will conduct archaeological field investigations during the day under the guidance of professional archaeologists and attend occasional evening lectures on field methods, theory, Andean/Ecuadorian history and prehistory, and geoarchaeology.

This will be achieved through a combination of lectures, assignments, and hands on training. Students will also spend some time in the lab cleaning and documenting collected materials. Each field school participant will also be required to design and implement an independent project during the field season. The goal of the field school will be to teach students the basics of research, the scientific method, hypothesis testing, and project development by encouraging participants to develop and test research questions as part of their final project in the field school.

LEARNING OUTCOMES

By the end of the field season, students should know and understand the basics of archaeological theory, excavation methods, and understand basic scientific methods as utilized in archaeology. Participants should know how to lay out excavation units, basic excavation and mapping techniques, what techniques might best be suited to particular contexts, how to complete archaeological paperwork, and how to identify, sort, catalog, and prepare artifacts for analysis. Students should also understand how to identify general soil types and should understand basic concepts of site formation,

geomorphological processes, concepts of typology and cultural change through material items, as well as how evidence of material context can be related to evidence of cultural context.

DISCLAIMER - PLEASE READ CAREFULLY

Our primary concern is with education. Traveling and conducting field research involve risk. Students interested in participating in IFR programs must weigh whether the potential risk is worth the value of education provided. While risk is inherent in everything we do, we do not take risk lightly. The IFR engages in intensive review of each field school location prior to approval. Once a program is accepted, the IFR reviews each program annually to make sure it complies with all our standards and policies, including student safety.

We do our best to follow schedule and activities as outlined in this syllabus. Yet local permitting agencies, political, environmental, personal, or weather conditions may force changes. This syllabus, therefore, is only a general commitment. Students should allow flexibility and adaptability as research work is frequently subject to change.

Ecuador is an extremely ecologically diverse country and it is possible to go from frozen glaciers to sweltering jungles in a matter of hours. The project area is located at about 3,100 meters (10,000 feet) elevation, temperatures range from the high 60s (Fahrenheit) during the day to low 40s at night, and there are very few biting insects. During the day the sun can be very intense, and you can heat up very quickly; the relatively low humidity can be dehydrating and carrying drinking water is essential. UV radiation is also stronger at this high altitude and sunscreen is essential. Nights can be cold, and as there is no heat in the cabins, and the bathroom facilities are outdoors, students should have a good sleeping bag and warm evening clothes. In general, students should be prepared for a wide range of temperatures, especially if field trips take us to higher or lower elevations, or if you plan to travel before or after the field school. A few layers of clothing that can be removed or added as needed are best.

Students will enjoy relatively easy field conditions with most areas of excavation within a short walk from the compound. Most areas are within the fenced and protected archaeological park with guards on duty 24/7 and llamas being the most dangerous animal one might ordinarily encounter. Nonetheless, students should be ready and willing to hike and carry equipment to their specific excavations, work all day, and hike back to the compound in the evenings. For safety reasons, students will not be allowed to excavate in shorts. Sturdy boots will be necessary for much of the fieldwork.

The project lies in the Andean highlands and some activities will be conducted at even higher elevations. While most students have no trouble with the altitude, a short period of acclimation should be expected. If you have asthma, COPD, other breathing difficulties or previous problems with altitude sickness, it would be wise to consult your doctor and discuss your issues with the project directors. Students (especially students who plan on travelling after the field school) should visit a travel doctor to be sure they are up to date on all their vaccinations and take all necessary precautions for their journey. Students should also bring any personal medication they might require for their time in Ecuador.

For any medical concerns, please consult with your doctor. For all other concerns, please consult with the project director.

PREREQUISITES

No prerequisites are required for attendance. Nonetheless, prospective students should understand that archaeological field work is a serious and ultimately destructive undertaking and field work involves intense physical labor outdoors, often under less than ideal conditions to achieve specific project related goals.

GRADING MATRIX

Students will be graded on a combination of comprehension of assigned reading topics and participation, field exercises, field notebooks, and a final research project.

Lectures and Readings (20%): Students will receive a portion of their final grade derived from their ability to articulate and form questions based on the content of lectures and assigned readings. Students may be asked to write brief summaries or be quizzed on the contents of specific readings during the course of the field school.

Participation in Field Exercises (40%): A portion of students' grades will be based on their daily participation in the operations of the project. Students will cycle through various operations and tasks during the season and will be expected to willingly and enthusiastically engage in those activities. Uncooperative or negative behaviors or shirking work will be graded accordingly. Students will be graded upon their willingness to cooperate.

Field Notebooks (20%): Notes and observations in the form of a field notebook are integral to the success and appropriate documentation of archaeological fieldwork. Students will be required to keep a complete and professionally acceptable journal of daily activities, archaeological findings and interpretations. Incomplete notebooks or inappropriate entries are unacceptable and grades will be based on thoroughness, appropriate content, and a demonstration of an understanding of archaeological concepts will be graded positively.

Student Research Projects (20%): During the course of the project, students will be required to develop a research project in which they will form a hypothesis, develop a method to test the hypothesis, and form appropriate conclusions about their topic. Research projects will be developed by students according to their interests with the guidance of project directors and must be approved by directors before students begin conducting their research. Projects can involve observations from ongoing excavations or recording activities, analysis of artifacts, or related experimental activities with archaeological materials. Student projects should identify and investigate specific archaeological or anthropological problems that relate to the archaeology of the site or the region. Students will be required to report on their findings in a professional-style presentation to other members of the project during the final week of the field school.

TRAVEL & MEETING POINT

Hold purchasing your airline ticket until six (6) weeks prior to departure date. Natural disasters, political changes, weather conditions and a range of other factors may require the cancelation of a field school. The IFR typically takes a close look at local conditions 6-7 weeks prior to program beginning and make Go/No Go decisions by then. This time frame still allows the purchase of discounted airline tickets while protecting students from potential loss of airline ticket costs if we decide to cancel a program.

Students can meet field school staff at the Quito International Airport on Monday July 15, 2019. Students must inform the project staff of their arrival time in Quito before the project to arrange transport from the airport which is some distance from the site. If you are coming overland or would like to arrange your own transportation to the site, please inform the project as soon as possible and provide contact information. If you missed your connection or your flight is delayed, please call, text or

email project director immediately. A local emergency cell phone number will be provided to all enrolled students.

VISA REQUIREMENTS

A valid passport over six months from its expiration date is required to enter Ecuador. This is important; persons with less than six months before their passport expiration will be turned away at the airport. No visa is required for U.S. visitors for stays of 90 days or less. Stays of greater than 90 days will require a travel visa to be obtained in advance. Citizens of other countries are asked to check the embassy website page at their home country for specific visa requirements.

ACCOMMODATIONS

Students will stay in relatively comfortable field accommodations in 3-persons per-room onsite cabins with Wi-Fi, bathrooms, hot showers, and laundry facilities. Nighttime temperatures can be near freezing around the cabins, which are not heated, so students are encouraged to bring a sleeping bag in addition to the blankets that will be provided. Breakfasts will generally be informal, and lunches will consist of sandwiches and field food prepared by students themselves from foods provided, while dinners will be eaten as a group in the small site cafeteria, prepared by local cooks. Local foods are heavily based on potato and rice but can be accompanied by a variety of fruits, vegetables, and proteins. Some accommodations can be made for vegans, vegetarians, and students with allergies or special dietary restrictions, but other specific dietary restrictions such as kosher or halal meals may not be feasible.

COURSE SCHEDULE

All IFR field schools begin with safety orientation. This orientation includes proper behavior at the field area, proper clothing, local cultural sensitivities and sensibilities, potential fauna and flora hazards, review of IFR harassment and discrimination policies, and review of the student Code of Conduct.

Note: Ideally, students will begin readings before the start of the field school. Readings should be completed by the date on which they are listed. Recommended readings on the schedule relate directly to the associated lecture topics. Some recommended readings not listed on the schedule relate more to a broad understanding of archaeology and Ecuador rather than lectures.

Unlike places such as Peru where U.S. archaeologists have a long history of conducting fieldwork, it is difficult to find readings on Ecuador (and especially Cochasquí) written in English. Lectures and instruction will be conducted in English and knowledge of Spanish is not a requirement of the field school but, for students proficient in Spanish, some of the Spanish-language recommended readings may be extremely useful.

The lecture schedule will generally be adhered to but could change based on the availability of visiting experts. Unexpected visitors may be invited to present lectures and students should be prepared to attend and take notes. Students will be informed ahead of time of any changes to the lecture schedule.

Week 1 (Monday July 15-Sunday July 21)

Monday 8:00 AM-12:00 PM Airport pickups

12:00 PM Lunch

1-7:00 PM Airport pickups

7:00 PM Dinner

8:00 PM-2:00 AM Airport pickups

Tuesday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Introduction to Project & Cochasquí site

12:00 PM Lunch

12:30-5:00 PM Site Tour

5-7:00 PM Lecture: Archaeological Field Methods I - General Survey and Excavation (Ryan Hechler and Will Pratt)

Lecture Readings:

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 1: Introduction and Chapter 2: Goals of Archaeological Investigation. In *Field Methods in Archaeology*. Pp. 1-20. London and New York: Taylor & Francis.

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 4: Site Survey and Chapter 5: Methods of Excavation. In *Field Methods in Archaeology*. Pp. 41-112. London and New York: Taylor & Francis.

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 6: Data Preservation: Recording and Collecting. In *Field Methods in Archaeology*. Pp. 113-142. London and New York: Taylor & Francis.

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 7: The Handling and Conservation of Artifacts in the Field. In *Field Methods in Archaeology*. Pp. 143-158. London and New York: Taylor & Francis.

Uhle, Max (1954[1923]) The Aims and Results of Archaeology. In *Max Uhle, 1856-1944:* A *Memoir of the Father of Peruvian Archaeology*. John H. Rowe, ed. & trans. Pp. 54-100. Berkeley: University of California Press.

Wednesday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch 8:00 AM-12:00 PM Introduction to fieldwork

12:30 PM Lunch

12:30-3:00 PM Fieldwork

3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research project

Thursday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch 8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 Fieldwork

3-5:00 PM Free Time

5-7:00 PM Lecture: Research Design I - Archaeological Research and Complex Societies (Dr. David Brown and Ryan Hechler)

Lecture Readings:

Carneiro, Robert L. (1998) What Happened at the Flashpoint?: Conjectures on Chiefdom Formation at the Very Moment of Conception. In *Chiefdoms and Chieftaincy in the Americas*. Elsa M. Redmond, ed. Pp. 18-42. Gainesville: University Press of Florida.

Pauketat, Timothy R. (2007) Chapter 1: Principles and Principals. In *Chiefdoms and Other Archaeological Delusions*. Pp. 7-30. Lanham, MD: AltaMira Press.

Recommended Lecture Readings:

Lippi, Ronald D. (2003) Some Clues to the Prehispanic Expansion of Barbacoan Populations in Northwestern Ecuador. Paper presented at the symposium "Breaking Down Boundaries in the Intermediate Area: Toward a New Macro-Chibchan Synthesis," Paper presented at the 68th Annual Meeting of the Society for American

Archaeology, Milwaukee, WI.

Friday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch 8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork

3-5:00 PM Free Time

5-7:00 PM Lecture: Regional History I - Ecuadorian Prehistory, Climate Change, Volcanism (Dr. David Brown and Ryan Hechler)

Lecture Readings:

Athens, J. Stephen (1992) Ethnicity and Adaptation: The Late Period-Cara Occupation in Northern Highland Ecuador. In *Resources, Power, and Interregional Interaction*. Edward Schortman and Patricia Urban, eds. Pp. 193-219. New York: Plenum Press.

Villamarín, Juan A., and Judith E. Villamarín (1999) Chiefdoms: The Prevalence and Persistence of "Señoríos Naturales" 1400 to European Conquest. In *The Cambridge History of the Native Peoples of the Americas*. Frank Salomon and Stuart B. Schwartz, eds. Pp. 577-667, Vol. 3: South America, Part 1. Cambridge: Cambridge University Press. Read:

- Some General Characteristics of Chiefdoms (pp. 622-628)
- Chiefdoms and Empire in the Andean Regions (pp. 628-629)
- Northern Andes (Ecuador) (pp. 648-653)
- Conclusion (pp. 653-656)

Saturday

Field Trip to Hacienda Guachalá and nearby archaeological sites (Lunch at the Hacienda)

Lecture: Regional History II - Inka and Spanish Invasions (Field school directors)

Lecture: Ecuadorian History (Guachalá Hacienda owner Diego Bonifaz)

Lecture Readings:

Rowe, John Howland (2011) Ecuador under the Inca Empire: The Incas in Quito. In *Costume and History in Highland Ecuador*. Ann Pollard Rowe, ed. Pp. 70-84, 318-320. Austin: University of Texas Press.

Recommended Lecture Readings:

Bray, Tamara L., and José H. Echeverría Almeida (2014) The Late Imperial Site of Inca-Caranqui, Northern Highland Ecuador: At the End of Empire. *Ñawpa Pacha: Journal of Andean Archaeology* 34(2):177-199.

Salomon, Frank (1987) A North Andean Status Trader Complex under Inka Rule. *Ethnohistory* 34(1):63-77.

Sunday

Free Day (Students are required to return to site by 7:00 PM on Sunday)

Week 2 (Monday July 22-Sunday July 28)

Monday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch 8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Lecture: Research Design II - Geoarchaeology (Dr. Charles Frederick, Research Fellow, Department of Geography, University of Texas at Austin)

Lecture Readings:

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 10: Stratigraphy: Recording and Collecting. In *Field Methods in Archaeology*. Pp. 235-252. London and New York: Taylor & Francis.

Rapp, George, and Christopher L. Hill (2006) Chapter 2: Sediments, Soils, and Environmental Interpretations. In *Geoarchaeology*. 2nd ed. Pp. 25-59. Yale University Press: New Haven and London.

Tuesday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Wednesday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Field Work

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Lecture: Archaeological Theory I - Implementing Theory (Dr. Steve Black, Associate Professor, Department of Anthropology, Texas State University)

Lecture Readings:

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 3: Research Design and Sampling Techniques. In *Field Methods in Archaeology*. Pp. 21-40. London and New York: Taylor & Francis.

Black, Stephen L., and Kevin Jolly (2003) Chapter 5: Research Questions. In *Archaeology by Design*. Pp 67-82. Archaeologist's toolkit, Vol. 1. AltaMira Press.

Black, Stephen L., and Kevin Jolly (2003) Chapter 6: Developing your Research Strategy. In *Archaeology by Design*. Pp 83-98. Archaeologist's toolkit, Vol. 1. AltaMira Press.

Thursday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Friday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Field Work

5-7:00 PM Students write notes or work on research projects (Potential Guest Lecture)

Saturday

7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8-12:00 AM Fieldwork

After 12:00 Free time (Potential Guest Lecture in the Afternoon)

Sunday Free Day (Students are required to return by 7:00 PM on Sunday)

Week 3 (Monday July 29-Sunday August 4)

Monday 7:00 AM Students meet in dining hall for

7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Lecture: Archeological Theory II - Evolutionary Theory (Dr. David Brown)

Lecture Readings:

Hester, Thomas R., Harry J. Shafer, and Kenneth L. Feder (2009) Chapter 14: Chronological Methods. In *Field Methods in Archaeology*. Pp. 319-343. London and New York: Taylor & Francis.

Recommended Lecture Readings:

Trigger, Bruce G. (1990) Monumental Architecture: A Thermodynamic Explanation of Symbolic Behaviour. *World Archaeology* 22(2):119-132.

Doyon, Leon G. (2002) Conduits of Ancestry: Interpretation of the Geography, Geology, and Seasonality of North Andean Shaft Tombs. *Archeological Papers of the American Anthropological Association* 11(1):79-95.

Tuesday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch 12:30-3:00 Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Wednesday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Lecture: Field Methods II – Subsurface remote sensing in archaeology (Dr.

Chet Walker)

Lecture Readings:

Davis, Jera R., Chester P. Walker, and John H. Blitz (2015) Remote Sensing as Community Settlement Analysis at Moundville. *American Antiquity* 80(1):161-169.

Thursday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Friday-Sunday Free Long Weekend - Students can travel or stay on site. Students who travel will be

required to provide an itinerary and travel plans to project directors as well as arrange their own meals, transportation, and lodging. Travel arrangements can be made with the help of project directors. Students who stay on site can take local day trips with the help of project directors and will have lodging and meals provided. Students are required return to the site by 7:00 PM on Sunday.

Week 4 (Monday August 5-Sunday August 11)

Monday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Tuesday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Wednesday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Introduction to Archaeology

3-5:00 PM Fieldwork

5-7:00 PM Students write notes or work on research projects

Thursday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Free Time

5-7:00 PM Students write notes or work on research projects

Friday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8:00 AM-12:00 PM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork 3-5:00 PM Field Work

5-7:00 PM Students write notes or work on research projects

Saturday Field Trip (Yet to be determined site; Students will pack lunch)

Sunday Free Day (Students are required to return to site by 7:00 PM on Sunday)

Week 5 (Monday August 12-Sunday August 18)

Monday 7:00 AM Students meet in dining hall for breakfast and to make their own lunch

8-12:00 AM Fieldwork

12:00 PM Lunch

12:30-3:00 PM Fieldwork

3-5:00 PM Students write notes or work on final projects

Tuesday Final Day of Excavations- Students draw profiles and finalize paperwork and notes

Wednesday Close and Backfill Excavations

Thursday Organize materials and prepare them for storage

Friday Final Research Project Presentations

Saturday 8-12:00 PM Continue with project presentations if necessary & conduct Project

Evaluations

After 12:00 PM End of field season celebration

Sunday Students are taken to airport or begin their travels

EQUIPMENT LIST

Sturdy hiking boots

- Hat
- Sunscreen (it's expensive in Ecuador and you'll be using it a lot)
- Daypack/backpack
- Sleeping bag
- Flashlight
- Any medication you need and prescription medication to last for the duration of the field school
- Water bottle/water bottles, at least 2 liters (you can buy disposable water bottles and reuse them if you're worried about space, but there is only one small store in Cochasquí so make sure you hold on to them)
- Marshalltown Pointing Trowel 5" x 2"
- A rain jacket or rain poncho
- A warm jacket
- A towel
- A laptop computer (not required but if you have one and can bring it, you may find it useful while working on your research project)

REQUIRED READINGS

Athens, J. Stephen

Ethnicity and Adaptation: The Late Period-Cara Occupation in Northern Highland Ecuador. In *Resources, Power, and Interregional Interaction*. Edward Schortman and Patricia Urban, eds. Pp. 193-219. New York: Plenum Press.

Black, Stephen L., and Kevin Jolly

2003 Archaeology by Design. Archaeologist's toolkit, Vol. 1. AltaMira Press.

Carneiro, Robert L.

1998 What Happened at the Flashpoint?: Conjectures on Chiefdom Formation at the Very Moment of Conception. In *Chiefdoms and Chieftaincy in the Americas*. Elsa M. Redmond, ed. Pp. 18-42. Gainesville: University Press of Florida.

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Remote Sensing as Community Settlement Analysis at Moundville. *American Antiquity* 80(1):161-169.

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2009 Field Methods in Archaeology. 7th ed. London and New York: Taylor & Francis.

Pauketat, Timothy R.

2007 Chapter 1: Principles and Principals. In *Chiefdoms and Other Archaeological Delusions*. Pp. 7-30. Lanham, MD: AltaMira Press.

Rapp, George and Christopher L. Hill

2006 Geoarchaeology. 2nd ed. Yale University Press: New Haven and London.

Rowe, John Howland

2011 Ecuador under the Inca Empire: The Incas in Quito. In *Costume and History in Highland Ecuador*. Ann Pollard Rowe, ed. Pp. 70-84, 318-320. Austin: University of Texas Press.

Uhle, Max

The Aims and Results of Archaeology. In Max Uhle, 1856-1944: A Memoir of the Father of Peruvian Archaeology. John H. Rowe, ed. & trans. Pp. 54-100. Berkeley: University of California Press. [Original from 1923]

Villamarín, Juan A., and Judith E. Villamarín

1999 Chiefdoms: The Prevalence and Persistence of "Señoríos Naturales" 1400 to European Conquest. In *The Cambridge History of the Native Peoples of the Americas*. Frank Salomon and Stuart B. Schwartz, eds. Pp. 577-667, Vol. 3: South America, Part 1. Cambridge: Cambridge University Press.

RECOMMENDED READINGS

Bray, Tamara

2005 Multi-Ethnic Settlement and Interregional Exchange in Pimampiro, Ecuador. *Journal of Field Archaeology* 30(2):119-141.

2008 Late Pre-Hispanic Chiefdoms of Highland Ecuador. In *Handbook of South American Archaeology*. H. Silverman and H. Isbell, eds. Pp 527-543, Vol 3. Springer, New York.

Bray, Tamara L., and José H. Echeverría Almeida

The Late Imperial Site of Inca-Caranqui, Northern Highland Ecuador: At the End of Empire. *Ñawpa Pacha: Journal of Andean Archaeology* 34(2):177-199.

DeBoer, Warren R.

1995 Returning to Pueblo Viejo: History and Archaeology of the Chachi (Ecuador). In Archaeology in the Lowland American Tropics: Current Analytical Methods and Recent Applications. Peter W. Stahl, ed. Pp. 240-259. Cambridge: Cambridge University Press.

Doyon, Leon G.

2002 Conduits of Ancestry: Interpretation of the Geography, Geology, and Seasonality of North Andean Shaft Tombs. Archeological Papers of the American Anthropological Association 11(1):79-95.

Duncan, Ronald J.

1992 Precolumbian Art and Design in Nariño Ceramics. In *Arte de la Tierra: Nariño*. María Victoria Uribe Alarcón and Ronald J. Duncan, eds. Pp. 27-31, 20-21. Bogotá: Fondo de Promoción de la Cultura, Banco Popular.

Lippi, Ronald D.

2003 Some Clues to the Prehispanic Expansion of Barbacoan Populations in Northwestern Ecuador. Paper presented at the symposium "Breaking Down Boundaries in the Intermediate Area: Toward a New Macro-Chibchan Synthesis," Paper presented at the

68th Annual Meeting of the Society for American Archaeology, Milwaukee, WI.

Nesbitt, Jason

Wealth in People: An Alternative Perspective on Initial Period Monumental Architecture from the Caballo Muerto Complex. In *New Perspective on Early Andean Civilization:*Interaction, Authority, and Socioeconomic Organization during the 2nd and 1st Millennia B.C. Richard L. Burger, Yuji Seki, and Lucy C. Salazar, eds. New Haven: Yale University Publications in Anthropology.

Oberem, Udo

1974 Trade and Trade Goods in the Ecuadorian Montaña. *In Native South Americans: Ethnology of the Least Known Continent*. Patricia J. Lyon, ed. Pp. 346-357. Boston: Little, Brown.

Salomon, Frank

1987 A North Andean Status Trader Complex under Inka Rule. Ethnohistory 34(1):63-77.

Trigger, Bruce G.

- 1990 Monumental Architecture: A Thermodynamic Explanation of Symbolic Behaviour. *World Archaeology* 22(2):119-132.
- 2006 Chapter 9: Pragmatic Synthesis. In *A History of Archaeological Thought*. Pp. 484-528. Cambridge: Cambridge University Press.
- 2010 Chapter 10: The Relevance of Archaeology. In A History of Archaeological Thought. Pp. 529-548. Cambridge: Cambridge University Press.

Uribe Alarcón, María Victoria

The Archaeology of the Nariño Altiplano. In *Arte de la Tierra: Nariño*. María Victoria Uribe Alarcón and Ronald J. Duncan, eds. David M. Stemper, trans. Pp. 24-26, 20-21. Bogotá: Fondo de Promoción de la Cultura, Banco Popular.

RECOMMENDED READINGS FOR SPANISH PROFICIENT STUDENTS

Oberem, Udo

- 1981a Algunas características arquitectónicas de las pirámides de Cochasquí. En *Cochasquí: Estudios Arqueológicos*. Udo Oberem, ed. Pp. 59-69, Vol. 1. Otavalo: Instituto Otavaleño de Antropología.
- 1981b Los montículos funerarios con pozo. En *Cochasquí: Estudios Arqueológicos*. Udo Oberem, ed. Pp. 125-142, Vol. 1. Otavalo: Instituto Otavaleño de Antropología.

Uhle, Max

1939 Las Ruinas de Cochasquí. Boletín de la Academia de Historia 18(54):5-14.