

THE WARI ARCHAEOLOGICAL PROJECT, PERU

Course ID: ARCH 315B
June 16 – July 15, 2018

FIELD SCHOOL DIRECTORS:

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INTRODUCTION

The Huari Empire (ca. 600—1000 A.D.) is arguably the most enigmatic complex civilization to have ever existed. One of the earliest, most extensive, and powerful societies in the world, Huari emerged in an arid, rugged region of the Peruvian Andes called Ayacucho, an area that had no prior high cultural development, nor the benefits of an immense population, great wealth and abundant natural resources.



The **star** designates the Wari Capital. The **shaded area** is the known maximum extent of the Huari Empire (600--1000 A.D.)

Given these challenges, how did Huari become the first expansive civilization of the New World? The answer may be found in the sprawling, unexplored ruins of *Wari*, its eponymous capital city.

The *city* of Wari was one of the largest, most populous settlements in the ancient Americas. It is an immense urban metropolis, subdivided by imposing stone barricades into distinct neighborhoods, or districts. Wari's walls—up to 12 meters high and two meters wide—enclosed dozens of honey-comb-like neighborhoods. Like other capital cities, Wari's districts appeared over time and followed common construction patterns including multi-storied buildings built atop man-made platform mounds. These architectural complexes housed a labyrinth of courtyards, circuitous corridors, and cubicle-like rooms. Huge reservoirs fed a complex network of stone aqueducts, providing

fresh, running water to those dwelling therein. In its heyday, 50,000 people lived in this crowded, multiethnic city. Administratively, Wari was the epicenter of power, controlling all aspects of religious, civilian, economic, and military life.

Inside Wari's fortified walls—which snaked hundreds of meters in and around the city, the flow of traffic must have been convulsed and confused; narrow roads, ominous areas of restricted access, and mass circulation along a wide avenue that divided the city into northern and southern sectors. It must have presented a disconcerting image of fantastic shapes and dimensions for both residents and visitors alike. The distinctive architectural characteristics of Wari's now-ruined neighborhoods indicate that certain sectors served unique purposes—just like modern cities today. We find Wari's most spectacular and important buildings in the North Side, on a 250 ha. elevated plateau bounded by the main causeway on one side, and a steep ravine on the other. Here too, the royal roads and complex water system converged. The North Side's civic-ceremonial zone consisted of monumental plazas and public buildings where, *for over 400 years*, ceremonies were performed to legitimize the Huari Empire and glorify its achievements. Other, more private areas of this so-called *Sacred Zone*, were dedicated to religious worship and expression, while rulers in nearby palaces exercised enormous political power. In the North Side's cemeteries, finely carved megalithic mausoleums housed the bones of the exalted dead.

Of course, Wari also had less spectacular, industrial sectors peppered with storage warehouses, residential neighborhoods of humble houses, and artisans' districts devoted to producing everything from utilitarian handicrafts like cooking pots and textiles, to chic luxury goods made of exotic shells and feathers, rare metals, and semi-precious stones. These crowded installations, mostly housed on Wari's South Side, was the city's largest sector. Here, common-folk carried on the regular activities of daily life.

Yet despite centuries of unequaled imperial authority and influence, there are almost no historical references to Wari. The earliest account was written by Spanish chronicler Pedro Cieza de Leon in 1548. Who observed that, "Near Huamanga [modern Ayacucho] stands Viñaque [Wari], where there are large and old buildings which have been battered by the weather and are in ruinous conditions, and thus undoubtedly must have resisted over many years. When I questioned the neighboring Indians about who had built this place, they replied that it was established by other people, who had beards and were white like us [during an era] long before the Incas came to this region [in the 15th century A.D.]"

Then, for 300 years, there's nothing; the site remained a 'lost city' until the 20th century. It was then that the term "Wari" or "Huari," was coined. We don't know what the original inhabitants called themselves.

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.

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

Transferability: Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institutions prior to attending this field school.

AREAS OF INTERVENTION DURING THE IFR 2018 FIELD SEASON

VEGACHAYUQ MOQO

The most important ceremonial area at Wari is known as Vegachayuq Moqo. Located in the center of the *Sacred Zone*, it encompasses some 10,000 square meters. The complex is defined by an irregular polygonal enclosure of walls that separate it from other areas. Major architecture is located atop a 10-meter high platform mound. The main temple, known as a “D-shaped structure,” is encircled on two sides by plastered, painted walls, interspersed with several cell-like alcoves used to make offerings, and a series of roughly trapezoidal niches which once held the mummy bundles of revered ancestors.

Excavations in 2018 will continue in areas not finished in previous seasons. Outside the large enclosures of Vegachayuq Moqo, on a small plain, we found *another* D-shaped structure and began excavating it in 2016. Under the floor of this temple, we found an occupation associated with the earliest era of Wari development. We will now expand our unit inside the temple. We will also extend excavations into a subterranean passageway that directly connects the D-shaped temple to ceremonial platforms and a sunken courtyard. The passageway is well-crafted and was probably used for burials, but we still need to define its full extension and function. The final sector of intervention at Vegachayuq Moqo corresponds to the inner periphery of the main D-shaped temple, which has 18 niches and a diameter of 20 meters. This D-shaped temple has a compact floor, a sundial, and evidence of frequent ritual and astronomical activities. At some point, the temple was abandoned, evinced by the

Proposed units at Vegachayuq Moqo (boxes)



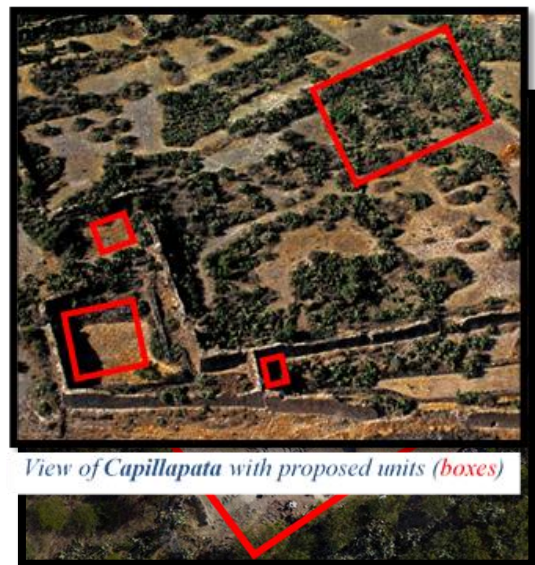
*A GoogleView of Wari. Over 90% of the site is unexplored, but you can still distinguish scores of quadrangular and circular walls and enclosures covered in greenish vegetation (e.g., the area inside the **green square**). The **Sacred Zone** sectors we will excavate during the **IFR 2018 Field Season** lie within the **red rectangle**.*

intentional destruction of large, exquisite vessels.

CAPILLAPATA

Capillapata is a large sector that has never been properly investigated. It is located at the northwest end of the *Sacred Zone*, and identified by its super-massive walls which overlook a steep ravine. Many scholars think that Capillapata is a holy place, with apparent ceremonial components. Most notable is a fenced-in trapezoidal enclosure (3 ha.) which forms a segregated and serene chapel. There are dozens of small, square niches in the chapel's walls, inaccurately identified as pigeon-holes, which appear to have once supported tenoned heads. However, others have hypothesized that this pigeon-holed, chapel-like room was actually a vibrant marketplace of sorts, where large groups of people met and exchanged their goods, and services. Both hypotheses await the results of our excavations.

To better define the functionality and spatial distribution of Capillapata's complex grid of architectural spaces, including the pigeon-hole chapel, we will extend our excavations by about 80 square meters. In particular, this expansion will allow us to investigate an 'empty space' adjacent to one of Capillapata's enclosures which, uniquely, has finely carved stone walls and is painted a vibrant red. Far from empty, this space appears to be a long, narrow passageway that originates in the lobby area of the vibrant red room. In the other direction, we think the passageway snakes towards another D-shaped structure and platform mound. We will be able to confirm this once we complete the upcoming season of excavations.



View of Capillapata with proposed units (boxes)

View of Chupapata with proposed units (box)

CHUPAPATA SECTOR

The Chupapata sector forms the last part of the *Sacred Zone* plateau, but is separated from Vegachayuc Moqo and Capillapata by the modern highway. Geographically, Chupapata corresponds to the southwest boundary of the city. The complex is delimited by a poorly preserved perimetric wall that follows the contours of a steep cliff. Surface remnants of another long wall enclose a quadrangular enclosure whose interior is home to two multi-storied megalithic mausoleums made from impeccably carved stone slabs. These mausoleums show obvious signs of being disturbed and looted sometime in antiquity. A small esplanade of buried walls and tiny rooms surround the burial chambers. Archaeological work this upcoming season will record all depositional and post-depositional events at Chupapata. To complete this task, we will expand the current excavation unit by about 400 square meters.

CERRO SAN CRISTOBAL SECTOR

Cerro San Cristóbal is a naturally elevated part of Wari, on whose skirts lie the famous necropolis of Cheqowasi and, nearby, a sacred crevice called Infiernillo Cave. The top of the San Cristobal hill, called Rayosqa, has an abundant amount of quarried and carved stones. The central part of the Rayosqa extension has been artificially, built up, flattened, and leveled. This plaza-like feature has an irregular form that is restricted by the adjacent rocky outcroppings. Many of these rocks have been marked with petroglyphs that represent the sacred Paty tree. Other boulders have dozens of small, ground-in circular holes that were probably once used for astronomical activities. There are also several notable structures which were built on top of walled-in quadrangular platform mounds within Rayosqa's plazas. One building, rarely seen during the Huari Era, is an above-ground tomb called a chullpa. Another unusual edifice is a deep conical tank which was covered by a massive, carved stone slab with hole in the middle. At first glance, this beehive-shaped structure, hewn five meters into the bedrock, looks like a deposit or cistern, but, like the chullpa, it was probably used as a grave. We hope to prove this conclusively in 2018.

To the southwest of these curious tombs, there is another square building with rounded corners. It has several security features which are commonly found at sentry posts and watch towers. From this find, we may now surmise that an unknown number of appointees guarded and observed Wari's entry points. They held vigil from an elevated vantage point, where one could easily inspect and scrutinize the whole city which unfolded below. During the upcoming field season, we aim to more fully define Cerro San Cristobal's primary function(s), uncover all obscured features, and better understand the sector's strategic viewshed.

DISCLAIMER – PLEASE READ CAREFULLY!

Field conditions are different than those you experience in your home or university. Ayacucho is characterized by high altitude (2,700 meters/9,000 feet above sea level) steppes and mountain valleys in a low-humidity, semi-arid setting at a subtropical latitude. Temperatures vary considerably between day (21°C / 70°F) and night (10°C / 50°F).

Archaeology at Wari is both physically exhausting and tedious. It's also very hot and very dusty. Biting flies, orb spiders, and cacti present other challenges. You may be expected to walk several kilometers on any given weekday, carrying field gear, human remains, or other artifacts. There are no formal bathrooms at the site, so you should prepare yourself accordingly.

An important part of this project is learning to deal with the circumstances at hand, and to make the best of a given situation with the tools available. This is not a summer vacation. We expect all members of our project to be patient, upbeat, flexible, and prepared.

If you have any medical concerns, please consult with your doctor. For all other concerns, please consult with the project director – as appropriate.

MAJOR RESEARCH QUESTIONS

In addition to Cerro San Cristobal, Capillapata, Vegachayuq Moqo, and Chupapata all form the "architecture of power" of the *Sacred Zone*. However, we still don't know much about each sector. To address this lacuna, we employ a set of key research questions to guide our work at the site:

- Does the *Sacred Zone* correspond to a single group of elites, or was it used by many groups of people?
- Was the *Sacred Zone* built in a single constructive moment, or sequentially over time?
- Do sectors in the *Sacred Zone* function independently, or are they linked, complementary entities?

- Are different sectors ranked hierarchically in terms of sacred status or actual function?
- Are there additional, intact, and distinct tomb types still awaiting discovery in the *Sacred Zone*?
- Do different tomb forms and tomb locations correspond to distinct members or groups in society?
- When were the tombs built, and when did they fall into disuse?
- Does the intentional dismantling and abandonment of the *Sacred Zone* suggest violent pillaging by enemy assailants, or rather planned withdrawal by evacuating extirpators?

SPECIFIC INFORMATION ABOUT THE 2018 FIELD SEASON AT WARI

PREREQUISITES

There are no prerequisites for this experiential learning course. Students will learn how to conduct archaeological research on-site. Participation in Project Wari involves physical labor and rustic living which entails patience and professionalism distinct from a typical university learning environment. Participants are required to come equipped with enthusiasm, a positive, 'can-do' attitude, and a clear understanding of the challenges involved in this type of endeavor.

While all are welcome, this program will most benefit students who 1) seek engagement with Spanish-speaking counterparts on a large-scale, Peruvian archaeological project, and 2) need additional experience to apply to graduate school or fellowship programs. Knowing Spanish is helpful, but not a requirement.

OBJECTIVES AND OUTCOMES

This course is designed to expose participants to a broad range of anthropologically informed research. Students will participate in excavations and laboratory analyses and learn how archaeological data is collected and processed. Participants will learn how to interpret multiple data sets and test working hypotheses. By the end of the session, participants should be able to excavate a unit and engage in comprehensive artifact analysis. To achieve these objectives, this course will:

- Provide a practical working knowledge of *archaeological field and lab methods*, including excavation, analysis, cataloging, and conservation;
- Introduce the *intellectual challenges of archaeological research*, including research design, the interpretation of data, and the continual refinement of hypotheses and field strategies regarding information recovered in the field.

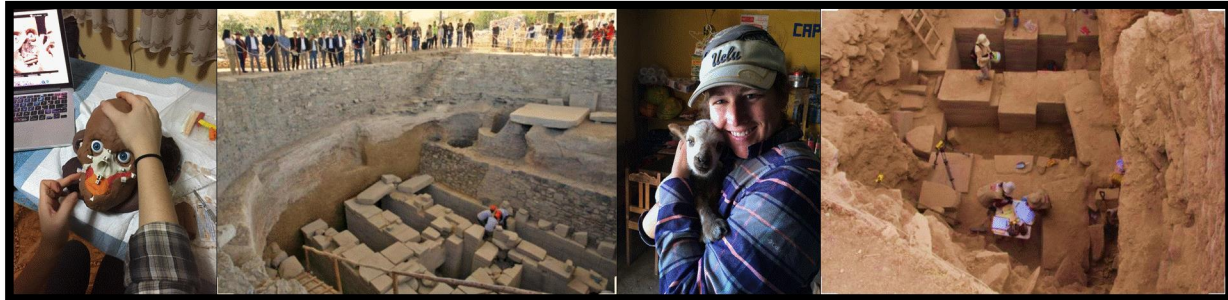
Upon successful completion of the session, you will have the ability to:

- Learn how archaeological data is collected in the field and the laboratory
- Develop the practical and analytical skills necessary for the interpretation of distinct data sets
- Apply standard excavation methods to archaeological contexts
- Use standard recording techniques to document excavation results
- Undertake preliminary processing of archaeological remains and artifacts

GETTING TO AYACUCHO

You are responsible for making your own travel arrangements. Note that all international flights land at Jorge Chavez International Airport in Lima, Peru's Capital. It is there where you must go through customs and immigration before boarding any connecting flights. Students will be met by project staff at the Ayacucho Airport (airport code: AYP) at 4:30pm on the first day of the field school (June 16). Students will be met at the arrival area, immediately after you exit baggage claim. Look for a project staff member holding the sign "IFR Field School". Don't worry about missing us: it's a tiny airport. Ayacucho is served by twice daily domestic flights from Lima. LATAM is our preferred carrier. Consider

purchasing one ticket from your departure home airport directly to Ayacucho as this might be the cheapest ticket available. There are many buses between Lima to Ayacucho and the trip takes about 12 hours over paved roads. Cruz del Sur is the most 'tourist-friendly' bus company. However, the highway is winding, interminable and generally unsafe. We *strongly* encourage students to fly to Ayacucho rather than taking the bus.



The Ayacucho Airport is the designated meeting point. If you can't make it to the meeting point at the scheduled arrival time (4:30 pm, June 16), take a taxi to *Hotel San Francisco De Paula* (Address: Jiron Callao 290), near Ayacucho's Plaza Mayor [main plaza]. The concierge will help you contact Project staff. The Project cannot reimburse you for any expenses if you fail to reach the meeting place at the scheduled time, or otherwise fail to meet staff due to your own actions (this excludes flight cancelation/delays).

STAYING HEALTHY IN AYACUCHO

Students and staff are expected to maintain a reasonable level of hygiene that befits communal living. Also, despite precautions, you should expect mild bouts of stomach upset and possibly diarrhea during your travels. Over-the-counter remedies are adequate for most; serious infections require antibiotics. If you have any special health needs, talk with your doctor. *You will be covered by the IFR health insurance for the duration of the program, but are ultimately responsible for your health status, treatment options, and any medical costs (before any claims and reimbursements).* If you have any conditions that require medications or treatments, or if a lack of treatment could result in you hurting yourself or others, you **must** inform the Project Directors in writing. The Centers for Disease Control minimally recommends vaccines against **Typhoid** and **Hepatitis A** for travel to Peru. You should obtain all vaccinations at least 4-6 weeks before your trip to allow time for them to take effect.

ACCOMMODATIONS AND MEALS IN AYACUCHO

Participants will stay at a house rented by the project that will have common rooms and clean, but rustic and basic facilities. Conditions are provincial, and participants share accommodations. There is running water, but we do not guarantee that it will be plentiful, potable, or hot. Rolling blackouts may also occur. Beds are provided but students are responsible for linens and are encouraged to bring sleeping bags. Lastly, the project maintains a communal kitchen and dining area with a stove, coffee maker, mini-fridge, and other essentials like pots & pans, and dishes & flatware.

With respect to diet, the project provides plenty of nutritious but basic breakfast and lunch offerings in the tradition of local highland Andean (Quechua) cuisine. Breakfast usually consists of coffee, tea, evaporated milk, fruit, cereal, fresh baked bread, jams, butter, and oatmeal. Hot lunches, prepared and served at the site, are heavily based on staples like rice, corn, potatoes, legumes, pasta, and some animal protein such as eggs and chicken. *Our cooks can't accommodate strict vegetarian, vegan, gluten-*

free, kosher or other specialty diets. Those with specialized diets will find their options very limited and should be prepared to bring their own food down, or purchase items locally to supplement their diet.

Note that the project provides breakfast and lunch Monday through Friday, but *you are responsible for all meals on Saturdays and Sundays.* **Dinner will not be prepared and provided by the project.** Those who wish to eat out for dinner on weekdays, and for breakfast, lunch, and dinner on weekends, should allocate an additional \$200-\$300 for the duration of the project. Ayacucho is known as a foodie's paradise and cheap-eater's heaven. There are scores of very affordable restaurants which provide delicious foods and offer a diverse range of local, regional, and international cuisines.

Alternatively, the project will maintain a cupboard stocked with basic staples and foodstuffs. Participants can use the facilities and food available to prepare dinner for themselves, free of charge.

If you decide to supplement a dish with a special ingredient, or fulfil a between-meal craving, the Farmer's Market offers a mind-boggling array of fresh fruits and vegetables among other produce, baked goods, prepared food, sundries, and dry goods. Finally, if you want "western style" items like soft drinks, ramen noodles, and other imported snacks, you can buy them at the neighborhood bodega or in of the city's large and well-stocked supermarkets.



ORGANIZATION AND GOALS

1: Field Work: During our excavations, we will place units in domestic and ritual structures. Our aim is to excavate, screen, and inventory all material culture; this is slow, meticulous work. Each unit will consist of 2-3 IFR participants, several local Peruvian students, a unit supervisor, and a local field technician. Deposits at Wari extend up to 7 meters below the surface, and up to 12 meters above ground. Due to this immense scale, IFR participants will literally only have time to 'scratch the surface' of this ancient cosmopolis. Nevertheless, in that time, we expect to recover several thousand associated objects (i.e., ceramics, stone and bone tools, etc.) and possibly human skeletal remains.

2: Lab Work: We will begin to clean and catalogue all artifacts recovered from the site. This initial examination will employ standard archaeological, osteological, petrographic and bio-geochemical techniques, and conform to specifications set by the Peruvian Ministry of Culture and the approved codes of ethical conduct established by our discipline. A secondary objective is to collect organic material, such as human and animal bone samples for radiocarbon (C-14), ancient DNA, and isotopic analyses. This class of testing allows us to reconstruct the timing of significant events, as well as ancient kin groups, diets, and migration patterns. For instance, human teeth, which are likely to retain genetic material, will be removed for amplification. Samples of local and archaeological flora and fauna are collected to reconstruct paleo-ecological and landscape data, and allows us to compare various isotopic values to infer nutritional and migration patterns for the people, plants, and animals that once populated this capital city.

GENERAL EXPECTATIONS

Students are expected to follow all project guidelines and policies throughout the duration of the field school. As representatives of the international archaeological community, students will follow all Peruvian laws, show respect for local communities and citizens, and conduct themselves in a civil and responsible manner when dealing with archaeological resources and their fellow field school participants and staff. Students should bring any issues or concerns that may impact their ability to participate in required activities or their overall performance to the attention of field school staff promptly. Significant disruptive conduct and/or behavioral problems will result in expulsion.

GRADING MATRIX

- 25%: ACTIVE PARTICIPATION IN SCHOLARLY ACTIVITIES:** You are expected to *actively* participate in all lectures, discussions, seminar, training sessions, and workshops. You are also expected to contribute to weekly discussions based on readings, field trips, and lectures, and other prompts. Remember, fieldwork is not easy, so you must be prepared for frustration, tedious assignments, slow, measured progress, and possible delays. Understand that you will be part of a team, working with professionals who expect you to work together as a unit and contribute as appropriate.
- 25%: FIELD & LAB WORK:** You are expected to participate in all field activities which may include, survey, excavation work like digging, sweeping and bucket lifting, screen sifting, bagging and tagging artifacts, mapping units or finds therein, and carrying things which may be bulky or heavy. For all lab work, you must keep accurate and complete records for all materials. In general, lab activities may include: washing, labelling, cataloguing or taking inventory, note-taking, drawing, measuring, sampling, sorting, counting, weighing, data entry, photography, bagging things, carrying or moving bags or boxes of objects, conservations work, cleaning, and other similar activities.
- 25%: FIELD JOURNAL:** You must keep a detailed notebook which will be submitted and evaluated by supervisors. Remember, you are the first person in *over one-thousand years* to see and study these contexts and artifacts. As such, reliable registry and observation at every step of the process is the only way of saving this data for future analysis and interpretation. It is vitally important to record and can recall everything you saw and thought at the time. Those who do not meet their full potential in this category assessment will be put on notice.
- 15%: ARCHAEOLOGY EXAM:** This exam will: a) test your understanding regarding Peruvian culture, b) gauge your understanding of project rules, expectations, and codes of conduct and c) ask you to address how key methods and approaches can answer questions of anthropological significance. You will choose a domain of your liking, such as burial excavation, artifact analysis, etc. to frame a discussion on approaches and limitations in data collection, and how variable patterning may support or disprove research hypotheses.
- 10%: MINDFULNESS AND ENGAGEMENT:** Your participation in this program explicitly acknowledges your intention and desire to contribute to archaeological scholarship. You'll have good days and bad days, but regardless, excessive complaining, bad attitudes, tantrums, freak-outs, sluggish enthusiasm, and anger management problems will not be tolerated. One way of avoiding these funks is being mindful and engaging in public education and outreach through planned activities and mini-projects. The goals of outreach are to gain support in preserving the archaeological record, and explain how archaeology informs on the past and the present. While Spanish is not a pre-requisite for such work, being open to cultures other than your own, to different ways of thinking of and interpreting the world is vital. Students are expected to learn as much from the local community tradition, heritage, ideology and social structure as from the archaeology itself.

GENERAL AND DAILY SCHEDULE

All participants follow the same daily schedule *Monday through Friday*. Lectures will be given by the Project Directors, Staff, and Visiting Scholars. Work takes place between 8 am and 4pm, with a 1-hour lunch break at noon. We continue working until 6 pm, after which is free time. On some *Saturdays*, we may do ‘catch-up work’ (e.g., cleaning artifacts from the previous week). *Sundays* are personal time.

<p>WEEK 1 LECTURES</p> <p>Monday: Geography and Chronology in the Andes Tuesday: The Huarpa Culture Wednesday: The Rise of the Wari Empire Thursday: The Fall of the Wari Empire Friday: Ayacucho After Collapse</p>	<p>Readings: <i>LaLone, Isbell & Cook, Isbell & Schreiber</i></p>
<p>WEEK 2 LECTURES</p> <p>Monday: The Inca Incursion Tuesday: Spanish Conquest and Syncretism Wednesday: An Independent Republic Thursday: Sequela of the Shining Path Friday: Contemporary Society in the <i>Sierra</i></p>	<p>Readings: <i>Petersen, Thiedon, Schreiber</i></p>
<p>WEEK 3 LECTURES</p> <p>Monday: Conserving Cultural Patrimony Tuesday: Wari Settlement Patterns Wednesday: Wari Architectural Tropes Thursday: Wari Lithics and Megaliths Friday: Wari Ceramics I: Chakipampa and Ocros</p>	<p>Readings: <i>Meddens & Branch, Williams, Moseley et. al, Finucane et. al 2007</i></p>
<p>WEEK 4 LECTURES</p> <p>Monday: Wari Ceramics II: Vinaque and Huamanga Tuesday: Wari Luxury Goods and Exotic Imports Wednesday: Wari Mortuary Practices: Skeletons and Mummy Bundles Thursday: Age, Sex and Stature Determination Friday: Paleopathological Assessment of Disease and Trauma</p>	<p>Readings: <i>Cook, Tung and Cook, Finucane et.al. 2006</i></p>

WHAT TO PACK:

- o 1 pair jeans or work pants
- o 1 pair comfy pants
- o 2 t-shirts
- o 1 long-sleeve shirt
- o 1 sweater or sweatshirt
- o 1 windbreaker w/ hood
- o 7 pairs of socks
- o Undergarments
- o 1 bandana
- o 1 brimmed hat
- o 1 pair of hiking shoes
- o 1 pair of house shoes
- o Bath towel
- o Sleeping bag & crash pad
- o Backpack or daypack

Recommended Gear:

- o Water bottle
- o Sunglasses
- o Power Transformer
- o Duct tape
- o Multi-Tool
- o Smart Phone/Tablet
- o Flashlight or headlamp
- o Your favorite snacks

Suggested Toiletry/First Aid Gear:

- o Hair brush
- o Toothbrush/Floss
- o Toothpaste
- o Sunscreen
- o Shampoo
- o Deodorant
- o Tampons/DivaCup
- o Hand Sanitizer
- o Eyeglasses/Contacts

- o OTC pain relief
- o Anti-itch cream
- o Dr. Scholl's Moleskin

- o OTC GI meds
- o Travel Pack Tissues
- o Bug Spray 100% Deet

- o Baby Wipes
- o Neosporin
- o Antibiotics

Suggested Archaeological Equipment – *Store your gear in a plastic art supply storage box/tackle box*

- | | | |
|--|--|--|
| <input type="checkbox"/> Wide & fine paint brushes | <input type="checkbox"/> Field Notebook | <input type="checkbox"/> Fine/ extra fine Sharpies |
| <input type="checkbox"/> Engineers' ruler (metric) | <input type="checkbox"/> Mechanical pencils | <input type="checkbox"/> Storage Clipboard |
| <input type="checkbox"/> Sliding caliper | <input type="checkbox"/> Clear nail polish | <input type="checkbox"/> Sample bags |
| <input type="checkbox"/> Nitrile Gloves | <input type="checkbox"/> Disposable face masks | <input type="checkbox"/> Eye protection |
| <input type="checkbox"/> Toothbrushes | <input type="checkbox"/> Bamboo tools/skewers | <input type="checkbox"/> Magnifying glass |
| <input type="checkbox"/> Jeweler's loupe | <input type="checkbox"/> Bulb Syringe | <input type="checkbox"/> Photo scale |
| <input type="checkbox"/> Marshalltown Trowel | <input type="checkbox"/> Line Level | <input type="checkbox"/> Folding metric ruler |
| <input type="checkbox"/> Q-tips/cotton | <input type="checkbox"/> mm graph paper | <input type="checkbox"/> small dissecting kit |
| <input type="checkbox"/> Post-it notes | <input type="checkbox"/> duct tape | <input type="checkbox"/> kneeling/knee pads |
| <input type="checkbox"/> Aluminum foil | <input type="checkbox"/> flex grip work gloves | <input type="checkbox"/> metric measuring tape |

REQUIRED READINGS:

Readings will be made available to enrolled students as PDF files

Cook, A. G. (1992). The stone ancestors: Idioms of imperial attire and rank among Huari figurines. *Latin American Antiquity*, 3, 341–364.

Finucane, B., Agurto, P. M., & Isbell, W. H. (2006). Human and animal diet at Conchopata, Peru. *Journal of Archaeological Science*, 33 (12), 1766–1776.

Finucane, B. C., Valdez, J. E., Calderon, I. P., Pomacanchari, C. V., Valdez, L. M., & O'Connell, T. (2007). The end of empire: New radiocarbon dates from the Ayacucho Valley, Peru, and their implications for the collapse of the Wari state. *Radiocarbon*, 49 (2), 579–592.

Isbell, W. H., & Cook, A. G. (1987). Ideological origins of an Andean conquest state. *Archaeology*, 40 (4), 27–33.

Isbell, W. H., & Shreiber, K. (1978). Was Huari a state? *American Antiquity*, 43 (3), 372–389.

LaLone, D. (2000). Rise, fall and semiperipheral development in the Andean world system. *J of WrldSys Re*, 1, 67–98

Meddens, F. M., & Branch, N. (2010). The Huari state, its use of ancestors, rural hinterland and agricultural infrastructure. In J. Jennings (Ed.), *Beyond Wari walls: Regional perspectives on Middle Horizon Peru* (pp. 155–170). Albuquerque: University of New Mexico Press.

Moseley, M. E., Nash, D. J., Williams, P. R., DeFrance, S. D., Miranda, A., & Ruales, M. (2005). Burning down the brewery: Establishing and evacuating an ancient imperial colony at Cerro Baul, Peru. *Proceedings of the National Academy of Sciences*, 102 (48), 164–172.

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