



THE UNIVERSITY OF
CHICAGO



CONNECTICUT
COLLEGE

ANALYSIS AND PREVENTIVE CONSERVATION OF PRE-COLUMBIAN TEXTILES, AREQUIPA, PERU

Course ID: TBA

June 28 – July 25, 2020

Academic Credits: 8 Semester Credit Units (Equivalent to 12 Quarter Units)

School of Record: Connecticut College

FIELD SCHOOL DIRECTORS:

Dr. María Cecilia Lozada, Department of Anthropology, The University of Chicago

(mclozada@uchicago.edu)

MA. Jessica Lévy Contreras, Pontificia Universidad Católica del Perú (jessica.levy@pucp.pe)



INTRODUCTION

This field school aims to analyze and preventatively conserve a collection of Pre-Columbian textiles recovered in 2012 and 2014 during the Vitor Archeological Project (VAP) in Arequipa, Peru. This collection derives from systematic excavations of the La Ramada culture influenced by both Nasca and Wari traditions in the south coast. After theoretical and practical training, students will be actively involved in preliminary conservation treatments and the analysis of organic material, principally textiles garments but also including diverse artifact assemblages, including basketry, wood, bone, shell and featherworks. From a multidisciplinary perspective, students will have the opportunity to learn different aspects of Nasca, Wari, and local material culture, with a special focus on production techniques, iconographic representation and worldview. While the focus of this field school is the analysis of textiles, an important overarching goal is for participants to learn about the nature of the expansion of Nasca and Wari outside their respective nuclear areas, and how this impacted local populations.

In 2012 and 2014, the Vitor Archaeological Project excavated a cemetery (V-05) associated with the Ramadas tradition in southern Peru (see video [here](#)). While human remains and ceramics have been systematically examined, a detailed analysis of the textile assemblage still needs to be conducted. Unlike the Ramada ceramic style that does not include any decoration, these textiles exhibit rich iconography that record the complex interactions between local cultures and Nasca and Wari traditions. In fact, radiocarbon dates from a variety of contexts suggest that La Ramada was contemporaneous with the late Nasca period in the Rio Grande region, 440-630 CE as well as the Wari throughout the Middle Horizon period.

Joerg Haerberli (2001) is currently the only researcher who has conducted a study of textiles from Ramadas cemeteries. He coined the term Siguas to refer to this textile tradition seen in the valleys of Vitor, Majes and Siguas in southern Peru. While his detailed work is extremely valuable, textiles used for his study were recovered from the surface and without contextual information. In contrast, the textile collection from the VAP originates from systematic excavations of mortuary contexts and therefore offers the unique opportunity to address the following questions:

- Is there a local textile tradition? If so, what are its defining features?
- While Haberli indicates that there is Nasca influence in the area, can this be identified in the textiles? If so, what is the nature of this influence, and which garments show them? Which elements?
- Tie die and featherworks are mostly attributed to Wari tradition in the region and multiple examples of these items have been recovered from V-05. Radiocarbon dates from specific contexts in V-05; however, indicates that they predate the emergence of Wari. Have these styles been erroneously attributed to Wari? If so, can a systematic study of the textiles offer key insights into the influence of Nasca into Wari tradition?
- How were garments used in mortuary ritual? Since there is detailed demographic information on the skeletal collection with which the textiles were found, this study will also be able to address textiles patterns with respect to gender and age categories.

As reported by Lozada and colleagues (2018) mortuary contexts still contained their original contents in situ. In fact, human remains were rarely removed, making it possible to reconstruct their life histories and aspects of their mortuary ritual including textiles used to dress up and wrap the body. In order to address the questions listed above, textiles used in this field school will be selected from specific mortuary contexts in an effort to maximize information. Textile studies will be complemented with skeletal data, and information about grave goods.

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>.

PREREQUISITES

There are no prerequisites for participation, as this is an experiential learning. Students will work in the lab and learn how to conduct textile analyses, preliminary conservation treatments, and documentation work. These activities require an attention to detail, careful handling of fragile objects, patience, and concentration. Prior exposure to pre-Columbian archaeology and knowledge of Spanish would be helpful, but is not necessary.

DISCLAIMER – PLEASE READ CAREFULLY

Our primary concern is with education. Traveling and conducting field research involves risk. Students interested in participating in any IFR program must weigh whether the potential risk is worth the value of education provided. While risk is inherent in everything we do, we take risk seriously. 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.

The IFR does not provide trip or travel cancellation insurance. We encourage students to explore such insurance on their own as it may be purchased at affordable prices. Insuremytrip.com or Travelgurad.com are possible sites where field school participants may explore travel cancellation insurance quotes and policies. If you do purchase such insurance, make sure the policy covers the cost of both airfare and tuition. See this [Wall Street Journal article about travel insurance](#) that may help you with to help to decide whether to purchase such insurance.

Students and faculty will live in the city of Arequipa which the second largest city of Peru. Weather is mild during the day (16-20°C) while at night temperatures may drop a couple of degrees. 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.

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

LEARNING OUTCOMES

The course focuses on the theoretical and practical elements of analyzing and preserving La Ramada textiles excavated in 2012 and 2014 by the Vitor Archaeological Project. As stated above, at the end of this field school, students will know the essential components of ancient textile analysis, documentation and preventive conservation. Furthermore, students will contextualize their study by visiting archaeological sites in the Arequipa regions, participate in seminars type centered around readings on Andean archaeology and learn about local museology.

MODULE I: Introduction to textile analysis and preventive conservation on archaeological materials (approx. 60 hours). Covers the following topics:

- Introduction to the archaeological context of the textiles to be studied.
- Introduction to the history and technical production of Pre-Columbian textiles, focusing on visual documentation and material observation, as well as the historical and archaeological context of the materials being studied.
- Basic methods and techniques in textile analysis. Lectures and workshops will focus on various components of textile analysis, including identification of a textile's *chaîne opératoire*,

production techniques, presence of raw or dyed fibers, and simple vs. complex structures of fabrics.

- Basic methods and techniques in preliminary conservation. Lectures and workshops will include discussions regarding conservations theory as well as practical hands-on activities that will review how to identify the state of conservation of objects. It will also comprehensively review conservation procedures and storage selection choices, examination of patterns and causes of deterioration in organic materials, as well as mechanical cleaning and gentle vacuum on archaeological textiles on storage.
- Analysis and conservation documentation. Lectures and workshops focusing on visual documentation and practice on materials, including digital photography by camera and Dino-Lite microscope, record data in technical forms and inventory, and digital recordation.
- Study visits to museums and archaeological sites accompanied by lectures.

MODULE II: Recording yarn structures, technical patterns and imagery of textiles discovered in the Arequipa region (approx. 60 hours). Covers the following topics:

- Introduction to Nasca, Wari and Sigwas textiles, technical patterns and imagery. Lectures and workshops will focus on visual documentation and observation on materials.
- Introduction to other textiles styles discovered in the Arequipa region. Lectures and workshops will focus on structural as well as technical differences.
- Preventive conservation and analysis of selected artifacts. Workshops will focus on photography, data recordation and inventory.
- Identify and record complex yarn structures on fabrics. Lecture and workshop focusing on practice training, including photography and data recordation.

MODULE III: Individual research (approx. 20 hours) and evaluation of final report.

GRADING MATRIX

Students will be graded based on their work as follows.

| % of Grade | Activity |
|------------|--|
| 10% | Following instructions and proper conduct in the lab, as well as participation |
| 20% | Pre-Columbian textile analysis |
| 20% | Pre-Columbian textile preliminary conservation |
| 15% | Graphic and photographic documentation |
| 10% | Digital data recordation |
| 25% | Final project |

Grades and the performance will be communicated to students under the director's supervision.

TRAVEL & MEETING POINT

We suggest you 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 cancellation 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. Such time frame still allows the purchase deeply discounted airline tickets while protecting students from potential loss if airline ticket costs if we decide to cancel a program.

Students will be met at the Arequipa airport (AQP) by project staff members on June 28, 2020. It is highly recommended that students fly to Arequipa and not take the bus from Lima.

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

US Citizens must have a valid passport and evidence of return or onward travel to enter and depart Peru. Travelers entering Peru on a U.S. passport receive a card and an entry stamp from Peruvian Immigration upon arrival stating the length of approved stay (usually 90 days). Extensions are not available, and overstays will result in fines. It is imperative that all travelers entering Peru – especially those crossing at a land border – obtain an entry stamp from Peruvian immigration authorities at the time and place of entry. Travelers without an entry stamp will not be allowed to exit the country. Immigration authorities often insist that travelers must return to the point of entry in order to obtain the stamp.

Citizens of other countries are asked to check the embassy website page at their home country for specific visa requirements.

ACCOMMODATIONS

Students and staff will stay in a rented house in the city of Arequipa known for its rich cultural heritage and unique cuisine. Mattresses will be provided for students to sleep. Laboratory facilities will be in the same house. A cook will prepare meals including breakfast, lunch and dinner during working days (M-F). The project will not be able to accommodate vegetarians or students with special diets. Students will explore local restaurants during their free days at their own expense.

COURSE SCHEDULE

All IFR field school begins with a safety orientation. This orientation will also review proper behavior in the field/laboratory, proper clothing, local cultural sensitivities and sensibilities, potential fauna and flora hazards, review IFR harassment and discrimination policies and review of the student Code of Conduct.

Typical work day

Activities of the field school takes place Monday to Friday, from 8.00 am to 8.30 pm. All students are expected to be present at and actively participate.

| | |
|---------------|---|
| 8-9 am | Breakfast |
| 9.30-12.30 pm | Morning session |
| 12.30-1.30 pm | Lunch |
| 2-4 pm | Afternoon session that includes students' presentations |
| 4-5 pm | OCHRE data entry |
| 5-7 pm | Free time |
| 7.30-8.30 pm | Dinner |

| Date | Morning session | Afternoon session |
|-------|---|--|
| Day 1 | Arrival to Arequipa (Peru) Welcome dinner Presentation of the team and participants, agenda and goals Orientation to the project | |
| Day 2 | Guided visit to the Museo Histórico Municipal Guillermo Zagarra Meneses | Guided visit to Museo Santuarios Andinos and the Museo de Arqueología de la Universidad Católica de Santa María (Arequipa) Discussion: Local museums |

| | | |
|-------|---|--|
| Day 3 | <p>Lecture: Introduction to the archaeology of the area, archaeological collection and contextual data</p> | <p>Lecture: Introduction to pre-Columbian textiles history and technology</p> <p>Workshop: Description of textile <i>chaîne opératoire</i>, technique and technology <i>Types of fibers used, dyeing process, spinning, weaving, twining vs. braiding threads, loom characteristics, stitches vs. repairs</i></p> <p>Discussion: Importance of textile studies in the Andes</p> |
| Day 4 | <p>Lecture: Introduction to textile preliminary conservation</p> <p>Workshop: State of conservation and conservation procedures <i>Breaks, missing parts, disintegration, presence of salts, dirt and microorganisms, carbonization vs. oxidation, stains, wrinkles, insect damage, fading, conservation procedures in the field and storage.</i></p> | <p>Lecture: Basic methods and techniques in textile analysis (1)</p> <p>Workshop: Identification of raw vs. dyed fibers, in addition to simple textile structures. <i>Basketry, wood, bone, shell and featherworks elements, plain weave fabrics, interloop vs. knotted fabrics, gauzes, warp/weft-faced fabrics, simple technical decorations on textiles (painting, appliqué, embroidery, fringes)</i></p> |
| Day 5 | <p>Lecture: Basic methods and techniques in textile conservation</p> <p>Lecture and workshop: Photo documentation and digital recordation <i>Scales and scales color, drawings</i></p> | <p>Lecture and workshop: How to record data in technical forms? <i>Type of artifact, materials, state of conservation, damage, preliminary treatments, technical descriptions, recommendation for further conservation and analysis, samples, type of storage</i></p> |
| Day 6 | <p>Lecture: Examine patterns and causes of deterioration in organic materials</p> <p>Workshop: Mechanical cleaning, gentle vacuum and storage selection choices <i>“First aid” cleaning in situ vs. in storage, eventual consolidation of the artifacts, lifting and packing for storage</i></p> | <p>Lecture: Textiles Inventory</p> <p>Workshop: Dino-Lite portable digital microscope <i>Photo documentation complementing identification of types of fibers, raw or dyed fibers and structures of fabrics</i></p> |
| Day 7 | <p>Lecture: Basic methods and techniques in textile analysis (2)</p> <p>Workshop: Identify complex textile structures of fabrics <i>Double-faced fabrics, sprang, tapestry, semili velours, complementary warps, discontinuity warps/wefts, supplementary wefts, complementing photo documentation with Dino-Lite digital microscope</i></p> | <p>Workshop: Mechanical cleaning, gentle vacuum and storage</p> <p>Discussion: Balance of the previous days, introduction to next week schedule</p> |
| Day 8 | Free day | |
| Day 9 | Excursion: Vitor Valley | |

| | | |
|--------|---|---|
| Day 10 | Lecture: Introduction to Nasca textiles, technical patterns and imagery Workshop: Photo documentation and digital recordation | Lecture and workshop: How to record yarn structures? <i>Spin and ply, angle of twist, diameter and density of the fibers</i> |
| Day 11 | Workshop: Preventive conservation and analysis of selected artifacts | Lecture: Introduction to Wari textiles, technical patterns and imagery (1) Workshop: Dino-Lite portable digital microscope |
| Day 12 | Lecture: Introduction to Wari textiles, technical patterns and imagery (2) Workshop: Photo documentation and digital recordation | Workshop: Preventive conservation and analysis of selected artifacts |
| Day 13 | Lecture: Introduction to Sigwas textiles, Technical patterns and imagery Workshop: Photo documentation and digital recordation | Workshop: Preventive conservation and analysis of selected artifacts |
| Day 14 | Workshop: Preventive conservation and analysis of selected artifacts | Lecture: Other textile styles discovered in the Arequipa region <i>Sigwas and Chuquibamba</i> Workshop: Dino-Lite portable digital microscope |
| Day 15 | Free day | |
| Day 16 | Lecture and workshop: Identify and recording complex yarn structures <i>Parenthetical notation method for recording yarn structures (Splitstoser 2012), reconstitution of complex threads</i> | Workshop: Preventive conservation and analysis of selected artifacts |
| Day 17 | Excursion: Majes Valley | |
| Day 18 | Excursion: Chuquibamba Museum | |
| Day 19 | Discussion: Similarities and differences between sites visited; balance of previous days, introduction to next week schedule | |
| Day 20 | Workshop: Individual research and elaboration of final report | |
| Day 21 | | |
| Day 22 | Free day | |
| Day 23 | Workshop: Individual research and elaboration of final report | |
| Day 24 | Workshop: Individual research and elaboration of final report | |
| Day 25 | Presentation of the workshop results and evaluation | |
| Day 26 | Completion of analysis, preliminary conservation and documentation tasks | |
| Day 27 | Packing | |
| Day 28 | Departure | |

REQUIRED READINGS

PDF files of all mandatory readings will be provided to enrolled students via a shared Dropbox folder.

Emmery, I.-*The Primary Structures of Fabrics: An Illustrated Classification*, Washington D.C.: The Textile Museum, 1966.

Haeberli, J.-"Tiempo y tradición en Arequipa, Perú, y el surgimiento de la cronología del Tema de la Deidad Central", In: *Boletín de Arqueología PUCP*, N°5 (2001), pp.89-137, 2002.

Lozada, M. C. et. al. -"Head Processing among La Ramada of Southern Peru", In: V. Tiesler and M. C. Lozada (eds.), *Social Skins of the Head. Body Beliefs and Ritual in Ancient Mesoamerica and the Andes*, pp 187-204. New Mexico Press, 2018.

Nigra, B. et. al. -"Reconstructing the Built Environment of the Millo Complex, Vitor Valley, Peru, Peru", *Ñawpa Pacha, Journal of Andean Archaeology*, N°37, pp. 39-62.

Splitstoser, J.-"The Parenthetical Notation Method for Recording Yarn Structure", In: *Textiles and Politics: Textile Society of America, 13th Biennial Symposium Proceedings*, Paper 745, Washington D.C., 2012.

RECOMMENDED READINGS

Adovasio, J.-*Basketry, Technology: a Guide to Identification and Analysis*, Chicago: Aldine, 1977.

Bergh, S.-*Wari: Lords of the Andes*, Cleveland: The Cleveland Museum of Art, New York: Thames and Hudson, 2013.

D'Harcourt, R.-*Textiles of Ancient Peru and their Techniques*, Seattle: University of Washington Press, 1977.

Hoces de la Guardia, M. and P. Brugnoli-*Manual de técnicas textiles andinas: terminaciones*, Santiago de Chile: Museo Chileno de Arte Precolombino, 2006.

Hoces de la Guardia, M. and P. Brugnoli-*Manual de técnicas textiles andinas: representación*, Santiago de Chile: Museo Chileno de Arte Precolombino, 2016.

King, H. (dir.)-*Peruvian Featherworks: Art of the Pre-Columbian Era*, New York: Metropolitan Museum of Art., 2012.

Moseley, M.-*The Incas and Their Ancestors: The Archaeology of Peru*, London: Thames & Hudson, 1992.

Murra, J.-Cloth and its Function in the Inca State, In: *American Anthropologist*, N°64(4), pp. 710-728, 1962.

Rowe, A.-*Warp-Patterned Weaves of the Andes*, Washington D.C.: The Textile Museum, 1977.

Sawyer, A.-*Early Nasca Needlework*, London: Laurence King Publishing, 1997.

Urton, G., and C. Brezine-"Khipu Accounting in Ancient Peru", *Science*, Vol.309, pp. 1065-1067, 2005.