









# GUANACASTE ARCHAEOLOGICAL PROJECT, COSTA RICA

Course ID: ARCH 330G July 5 - August 8, 2020

Academic Credits: 8 Semester Credit Units (Equivalent to 12 Quarter Units)
School of Record: Connecticut College

#### FIELD SCHOOL DIRECTORS:

Dr. Carrie Dennett, NMNH, Smithsonian Institution (cdennett2017@gmail.com)

Dr. Larry Steinbrenner, School of Arts & Science, Red Deer College (larry.steinbrenner@rdc.ab.ca)

Dr. Silvia Salgado González, Universidad de Costa Rica (silviasalgad@gmail.com)



# **INTRODUCTION**

Located on the delta of the Tempisque River in the province of Guanacaste, Palo Verde National Park and its surrounding environs in northwestern Costa Rica have long been recognized as key areas for the study of pre-Columbian and early Spanish colonial archaeology and history. The park, in the center of a densely populated and culturally diverse region, features deep archaeological sequences with some of the earliest evidence for human activity in this part of the country. It is also in the area where Spanish conquistadors first arrived in 1522—an event that forever changed the course of local history.

Established as a national nature reserve in 1980, Palo Verde is a protected Ramsar Wetland, wildlife refuge, and one of the last remaining tropical dry rainforests in the Neotropics. This environmentally complex delta area is home to the most diverse range of rare and/or endangered plants, animals, ecological niches, and pre-Columbian cultures identified in this part of Central America. Previous archaeological research in Palo Verde has identified a broad range of human activity areas, including open-air, cave, and lagoon sites as well as more complex, multi-functional communities demonstrating more than two millennia of occupation and exploitation (800 BC-AD 1522). Unfortunately, however, these incredibly important sites have been largely neglected in the 21<sup>st</sup> century and remain mostly uninvestigated.

The objectives of the Guanacaste Archaeological Project (GAP) are tied to research questions that focus on issues at the local, regional, and interregional scales. At the local level, the project seeks to better

understand daily life by investigating site use and the range of site functions occurring in this estuary zone. At the regional level, the project seeks to refine the chronology of Guanacaste and reconstruct the local material culture sequence(s). Ceramics constitute the main artifact class encountered in the region and will be a principal focus of this investigation. Finally, at the interregional level, the project seeks to gather data necessary to articulate sites in Palo Verde with sites beyond northwestern Costa Rica using compositional analyses.

How did people live and thrive within estuary-related communities in the delta? Were sites occupied periodically, seasonally, or year-round, and did settlement patterns, lifeways and subsistence change and evolve over time? In the 2020 field season, GAP will begin to seek answers to these fundamental questions. Team members will assist in reconstructing the organization and function of individual sites within Palo Verde through recovery and analysis of material culture, exploring aspects of domestic life, seasonal mobility, foodways, and resource exploitation strategies in an unparalleled ecological setting. Ultimately, the data collected during the field season will contribute to a 'big picture' research program that is using ceramic data to reconstruct pre-Columbian exchange networks within northwestern Costa Rica and beyond.

Sponsored by the Smithsonian Institution, the Greater Nicoya Ceramic Project (GNCP) uses neutron activation and petrographic analysis to determine not only how and where ceramics were made, but also where they ended up—sometimes hundreds of kilometers away from their source. Although the GNCP has already made significant progress in reconstructing exchange networks in NW Costa Rica and Pacific Nicaragua—collectively known as Greater Nicoya—the Tempisque delta has remained as a gap in the knowledgebase that needs to be filled. GAP's participation in the GNCP means that interested students will have unique opportunities to participate in extracurricular clay collection expeditions, contribute to the development of broader research questions based on field excavations, and aid in the selection of ceramic samples destined for compositional analysis.

#### **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: <a href="http://bit.ly/2hvurkl">http://bit.ly/2hvurkl</a>.

# **PREREQUISITES**

A positive attitude and a willingness to learn are the only requirements for this course. Otherwise, there are no prerequisites. Students will learn how to do basic archaeological excavation, research and analysis through hands-on, experiential learning conducted primarily in the field.

While Costa Rica is a Spanish-speaking country, Spanish fluency is not required, although students who can communicate in Spanish may have a richer experience.

Archaeology involves physical work and (in Costa Rica) exposure to hot, humid tropical conditions. Students should therefore be prepared for a considerably more strenuous experience than they might otherwise expect from either a university learning environment or an all-inclusive tropic resort! Expect to get dirty.

#### **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.

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. <a href="Insuremytrip.com">Insuremytrip.com</a> or <a href="Iravelgurad.com">Iravelgurad.com</a> 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 <a href="Wall Street Journal article about travel insurance">Wall Street Journal article about travel insurance</a> that may help you with to help to decide whether to purchase such insurance.

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.

Although this project is located in a developed area of Costa Rica (with most modern amenities) and therefore does not have to deal with many of the logistical challenges associated with research in more remote areas, it remains true that archaeological field work in the countryside can involve long days that may be physically demanding. Average daily temperatures in Guanacaste during the field season will hover around the +86°F/30°C mark, with high humidity. Evenings are somewhat cooler, but do not expect accommodations to feature air conditioning (electric fans will be provided). Since July and August are in the rainy season, participants can expect a lot of wet weather, and occasional rainy days may limit time in the field. Participants can also expect to encounter bugs, spiders, amphibians, snakes, and other entertaining wildlife while in the field. This is not a summer vacation. We expect participants to be prepared and maintain a positive, flexible attitude.

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

## **COURSE OBJECTIVES**

The objectives of this field school are to introduce students to the actual practice of field archaeology and to provide them with a basic understanding of the prehistory of northwestern Costa Rica and its place within the broader context of Central America and Mesoamerica. To achieve these objectives, students will first engage in one intensive week of classroom instruction and museum visits in Costa Rica's capital city of San Jose. Cumulatively, this activity will provide:

• A basic theoretical knowledge of fundamental archaeological principles (stratigraphy, dating techniques, artifact classes, formation processes, etc.);

- An overview of the archaeology and cultural history of Central America and Mesoamerica, with
  particular emphasis on the archaeological subarea of Greater Nicoya and its southern sector in
  northwestern Costa Rica (i.e., Guanacaste and Nicoya); and
- A basic familiarity with the archaeological culture of Guanacaste, the region where excavations will take place in weeks 2 through 5.

Through hands-on experience in the field in Guanacaste's Palo Verde National Park in weeks 2 through 5, students will acquire a working knowledge of most basic archaeological field methods, including survey, excavation, stratigraphic control, note-taking, laboratory classification and analysis, artifact inventory, and conservation. In the lab setting, students may have opportunities to focus on specific aspects of lab work (e.g., analysis, conservation, photography, illustration, etc.) and/or material culture classes that may interest them (e.g., ceramics, lithics, botanicals, etc.), although the focus will be on providing all students with exposure to the diverse range of tasks associated with lab work.

By participating in this field program, students will also become aware of the various challenges presented by archaeological research, including research design, data interpretation, and the logistics of managing a project subject to so many unknown variables.

#### **LEARNING OUTCOMES**

Students who successfully complete this course will be able to:

- explain and summarize basic archaeological principles and analytical techniques;
- apply basic techniques of archaeological excavation and data collection in the field;
- apply basic techniques of artifact processing, analysis, and data collection in a lab setting;
- identify the major cultural groups of pre-contact Central America and Mesoamerica;
- identify the major cultural groups inhabiting northwestern Costa Rica/Greater Nicoya prior to European contact and summarize their distinctive cultural features (including their potential connections to cultural groups elsewhere);
- explain and evaluate hypotheses concerning the relationships between cultural groups in Costa Rica/Greater Nicoya and the actual archaeological evidence.

## **GRADING MATRIX**

The general framework of evaluation is presented below:

25%	<b>EXAM:</b> At the completion of the first week of the project, students will write a short exam covering (a) fundamental archaeological techniques (excavation, analysis, etc.) and (b) the archaeology and cultural history of Central America and Mesoamerica in general and Greater Nicoya more specifically.
15% each (30% total)	FIELD & LAB WORK: Field activities may include (but are not necessarily limited to) survey, excavation, screening, tagging and bagging artifacts, mapping excavated units, drawing stratigraphic profiles, and data recording. Through daily practice, all students are expected to demonstrate progress towards a basic mastery of these skills over the course of 3-4 weeks in the field. Lab activities may include (but are not necessarily limited to) artifact processing and conservation (including washing, labelling, sampling and sorting, counting, weighing, measuring, cataloguing, inventorying, etc.) note taking, and illustration (drawing and photographing). All students are also expected to demonstrate progress towards a basic mastery of these skills over the course of 3-4 weeks in the field.
25%	FIELD JOURNAL: Archaeologist Kent Flannery once wrote that archaeology is the only branch of anthropology in which we kill our informants. What he meant is that the

archaeological record is destroyed in the process of its excavation. For this reason, note-taking is perhaps the most important task associated with field work; once the context is excavated, most future analysis and interpretation will be based on the notes that are recorded in the field. In the course of the project, you may be the first person to see and study a given artifact or archaeological content in centuries. It is therefore imperative that you record as much detail as you possibly can. Substandard note-taking will **not** be tolerated.

20%

**OVERALL PARTICIPATION & COLLABORATION:** Cooperation, positive attitude, willingness to work with others, and demonstrated interest in archaeological research are all elements that contribute to a successful field school. Archaeology is a team sport, and team members who do not pull their weight or otherwise shirk the responsibilities that they have agreed to accept by joining the project will not be tolerated.

#### **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.

Project staff will meet students arriving to Costa Rica at the Juan Santa Maria International Airport (SJO) in San Jose on Sunday, July 5. It is expected that students will arrive and depart Costa Rica via plane. Staff can accommodate varying arrival times (i.e., it is not required that **all** students arrive at exactly the same time), but students should try to coordinate their flights with project staff to arrive in late afternoon/early evening (i.e., between 3 p.m. and 7 p.m.). A more specific meeting time may be arranged closer to the start of the field school.

If you missed your connection or your flight is delayed, please call, text or email the project director immediately. A local emergency cell phone number will be provided to all enrolled students.

## **VISA REQUIREMENTS**

US and Canadian citizens may enter Costa Rica for up to 90 days for tourist or business purposes without a visa but must possess a return ticket to their home country. Your passport should be valid for the period of your stay, and we recommend that you make sure it is valid for at least one additional month (for Canadians, note that the Government of Canada *specifically* recommends that your passport be valid for at least 1 month beyond the date of your expected departure). Citizens of other countries are asked to check the embassy website page at their home country for specific visa requirements.

#### **ACCOMMODATIONS**

During the first week of the project in San Jose, students and non-Costa Rican staff will be housed in modest hotels (shared rooms) in San Jose. During the subsequent four weeks of the project, students and staff will stay in modern dormitories in Palo Verde National Park. Conditions will be basic but modern; air conditioning may not be available (fans will be provided).

All meals will be communal events. Meals during the first week in San Jose will comprise simple hotel restaurant and cafeteria fare. During the work week in the field, project personnel will be provided with cooked meals prepared by kitchen staff at Palo Verde National Park. Students will be required to arrange for their own meals on free weekends. It is unlikely that we will be able to handle very specific dietary needs; loosely vegetarian diets can probably be accommodated (though options may be limited), but

vegan and/or gluten-free diets will be difficult to accommodate. For these reasons, students are required to indicate any potential dietary restrictions and/or food allergies during their application interviews with PIs.

#### **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.

## WEEK 1 (San Jose, July 5-11)

Sunday (July 5)

Students arrive in San Jose and are collected at SJO airport.

Monday-Friday (July 6-10)

The first full week of the project will involve classroom work at the University of Costa Rica campus and study visits to museums in San Jose. A tentative schedule of the first week (subject to change based on classroom progress) is provided below. If the opportunity arises, this schedule may also be supplemented by short evening guest lectures by local scholars.

	Morning (8:00 a.m. – 12:00 p.m.)	Afternoon (1:00-5:00 p.m.)
Monday	Welcome/ Introduction to the Project <u>Lecture Topic 1</u> : Archaeology: The Basics Readings: Renfrew & Bahn chaps. 2-4; Fladmark.	Museum visit 1: Costa Rica National Museum
Tuesday	Lecture Topic 1 continued	Lecture Topic 2: Archaeology of Central America & Mesoamerica: A Brief Overview Readings: Evans 2013; Willey 1966.
Wednesday	Lecture Topic 2 continued	Museum visit 2: Jade Museum
Thursday	<u>Lecture Topic 3</u> : Archaeology of NW Costa Rica & Greater Nicoya Readings: Creamer 1992; Lange 1984, 1996a, 1996b; Snarskis 1981; Aguilar Vega n.d.; Herrerra Villalobos n.d.	<u>Lecture Topic 4</u> : Basic Principles of Ceramic Analysis Readings: Knappett 2005.
Friday	<u>Lecture Topic 5</u> : The Guanacaste Archaeological Project: Methodology & Objectives Readings: McCafferty & Steinbrenner 2005; Steinbrenner and McCafferty n.d. EXAM	Museum visit 3: Gold Museum; artisan's market

*Meals:* During the week breakfast will be served at the hotel. Lunches will be served in UCR's cafeteria. Dinners will be booked in various local restaurants.

Saturday, July 11

Personal day with no organized group activities. Students may choose to explore the city, book day tours, or simply relax.

WEEKS 2-5 (Palo Verde July 12 - August 7; return to San Jose August 7 for August 8 departures)

Sunday, July 12

Sunday morning we will leave for Palo Verde in Guanacaste (a 4-5-hour trip) for the field work phase of the project. Sunday afternoon will be a free day. Once field work begins, we will follow the approximate daily schedule described below:

# Weekdays (Monday-Friday):

6:00-6:45 a.m. Breakfast

7:00 a.m. - 12:00 p.m. Field survey/excavation (field time may vary depending on weather and/or progress)

12:00-2:00 p.m. Lunch and siesta break

2:00-5:00 p.m. Lab work & occasional guest lectures/discussions\*

5:30-6:30 p.m. Dinner

Approximately 1-2 times per week (time permitting), there will be informal discussions of assigned readings and/or guest presentations. All project members are expected to participate in these activities. A list of specific readings for discussions will be provided at a later date. There will also be at least one day trip during this period to the local potting community of Guaitil (a 1.5-hour drive from Bagaces), where much of the pottery for Costa Rica's tourist market is manufactured.

## Weekends:

- Saturdays will normally be free time but project members may occasionally be required to do lab
  work if processing of artifacts falls behind. Students who plan to book weekend excursions away
  from the project MUST clear their plans well in advance with project directors to avoid potential
  conflicts. In the event that project members are required to work on weekends, meals will be
  arranged.
- Sundays are normally personal time.

# Friday, August 7

Return to San Jose in the morning. Afternoon is free time. Farewell supper will take place at approximately 6 p.m.

Saturday, August 8
Departures from SJO.

## **EQUIPMENT LIST**

RECOMMENDED PERSONAL ITEMS:	EXCAVATION & LAB KIT:
Backpack and smaller daypack	(NOTE: this should all fit in a single pack or tool kit box)
Shower towel	• 5" Marshalltown pointed mason's trowel*
Shower sandals	<ul> <li>10" file (for sharpening trowel)*</li> </ul>
Shower caddy	Swiss army knife or multi-tool*
Wide brim hat or head cover	<ul> <li>5-meter retractable measuring tape (metric)</li> </ul>
Bandanna	Mason's string (1 roll)
Light jacket or rain coat	Gardening gloves (1 pair)
<ul> <li>Long and short sleeve cotton shirts</li> </ul>	Flagging tape
Light cotton work pants	Carpenter's line level (5)
• Shorts	Plumb bob
Socks (1 week's supply)	• 1/2" and 1" soft paint brushes
Underwear (1 week's supply)	Toothbrushes (2)

- Boots (must be worn in the field)
- Running shoes (for casual use)
- Sunglasses with UV protection
- Beach towel & swim suit
- Sunscreen
- Insect repellent
- Personal hygiene products and medication (as well as prescriptions)
- Water bottle (at least 1 liter)
- Duct tape
- Flashlight
- Small travel first aid kit
- Travel security locks
- Ziploc bags (various sizes)

- Sharpie pens (1/2 dozen)
- Mechanical pencils and drawing tools
- Erasers
- Notebook(s)
- Digital camera (and/or phone or tablet)
- USB cables for charging digital devices

\*Cannot be carried in carry-on baggage; your excavation kit should be part of your checked baggage.

# **REQUIRED READINGS**

The readings listed below will be posted online for students to access in advance of the project using a Dropbox shared folder.

#### Creamer, Winifred

- 1989 Mesoamerica as a Concept: An Archaeological View from Central America. *Latin American Research Review* 22: 35-62.
- 1992 Regional Exchange along the Pacific Coast of Costa Rica during the Late Polychrome Period, A.D. 1200 1550. *Journal of Field Archaeology* 19(1):1-16.

## Evans, Susan Toby

Ancient Mexico and Central America: Archaeology and Culture History. 3rd edition. Thames and Hudson, London. (selected excerpts only).

## Fladmark, Knut

1978 A Guide to Basic Archaeological Field Procedures. Department of Archaeology, Simon Fraser University, Burnaby, BC.

## Knappett, Carl

2005 Pottery. In *The Handbook of Archaeological Methods*, edited by Herbert D. G. Maschner and Christopher Chippindale, pp. 673-714. Alta Mira Press, Lanham, MD.

# Lange, Frederick W.

- 1984 The Greater Nicoya Archaeological Subarea. In *The Archaeology of Lower Central America*, edited by Frederick W. Lange and Doris Z. Stone, pp.165-194. University of New Mexico Press, Albuquerque.
- 1996a The Bay of Salinas: Coastal Crossroads of Greater Nicoya. In *Paths to Central American Prehistory* (Frederick W. Lange, ed.): 119-142. University Press of Colorado, Niwot.
- 1996b Gaps in Our Databases and Blanks in Our Syntheses: The Potential for Central American Archaeology in the Twenty-First Century. In *Paths to Central American Prehistory* (Frederick W. Lange, ed.): 305-326. University Press of Colorado, Niwot.

McCafferty, Geoffrey G., and Larry Steinbrenner

2005 Chronological Implications for the Santa Isabel Project, Nicaragua. *Ancient Mesoamerica* 16(1):131-146.

Renfrew, Colin and Paul Bahn

2018 Chapters 2-4. In Archaeology Essentials, 4th ed., pp. 38-141. Thames and Hudson, London.

Snarskis, Michael J.

1981 The Archaeology of Costa Rica. In *Between Continents/Between Seas: Precolumbian Art of Costa Rica, edited by Elizabeth P. Benson,* pp. 15-84. Harry N. Abrams, Inc. Publishers, New York.

Willey, Gordon R.

1966 Excerpt from *An Introduction to American Archaeology: North and Middle America, Volume 1.*Prentice-Hall, Inc., Englewood Cliffs, NJ.

Note: the following required readings will be published in the forthcoming volume, <u>The Archaeology of Greater Nicoya: Two Decades of Research in Nicaragua and Costa Rica</u> (Larry Steinbrenner, Alex Geurds, Geoffrey McCafferty and Silvia Salgado, eds.) which has been accepted for publication by the University of Colorado Press.

- Steinbrenner, Larry, and Geoffrey G. McCafferty. A Critical Re-evaluation of Pacific Nicaragua's Late Period Chronology.
- Aguilar Vega, Ana Cristina. Social Practices at La Cascabel, A Village on Culebra Bay (AD 800-1550).
- Herrera Villalobos, Anayensy, and Felipe Solís Del Vecchio. Human Bone Artifacts: Ancestor Cults and Human Sacrifice in a Community of Mesoamerican Origin in Culebra Bay, Costa Rica.

#### **RECOMMENDED READINGS**

Abel-Vidor, Suzanne

1980 The Historical Sources for the Greater Nicoya Archaeological Subarea. *Vinculos: Revista de Antropología del Museo Nacional de Costa Rica* 6:155-76.

Baudez, Claude F., and Michael D. Coe

1962 Archaeological Sequences in Northwestern Costa Rica. *Acta, 34th International Congress of Americanists* (Vienna 1960), pp. 366-73.

Benson, Elizabeth P. (editor)

1981 Between Continents/Between Seas: Precolumbian Art of Costa Rica. Harry N. Abrams, Inc. Publishers, New York, NY.

Drennan, Robert D.

1996 Betwixt and Between in the Intermediate Area. Journal of Archaeological Research 4 (2): 95-132.

Glassow, Michael

Excavation. In *The Handbook of Archaeological Methods*, edited by Herbert D. G. Maschner and Christopher Chippindale, pp. 133-175. Alta Mira Press, Lanham, MD.

Healy, Paul F.

1980 Archaeology of the Rivas Region, Nicaragua. Wilfred Laurier University Press, Waterloo, ON.

Hoopes, John

- 1994 The Tronadora Complex: Early Formative Ceramics in Northwestern Costa Rica. *Latin American Antiquity* 5(1):3-30.
- The Emergence of Social Complexity in the Chibchan World of Southern Central America and Northern Colombia, AD 300-600. *Journal of Archaeological Research* 13(1):1-47.

Lange, Frederick W., and Doris Z. Stone (editors)

1984 *The Archaeology of Lower Central America.* University of New Mexico Press, Albuquerque, NM. (Chapters 4, 7, and 12 only).

Lange, Frederick W., and Lynette Norr, eds.

1986 Prehistoric Settlement Patterns in Costa Rica. Journal of the Steward Anthropological Society 14(1982-83) Urbana, IL.

# Sheets, Payson D.

1992 The Pervasive Pejorative in Intermediate Area Studies. In *Wealth and Hierarchy in the Intermediate Area*, edited by Frederick W. Lange, pp. 15-41. Dumbarton Oaks Research Library and Collection, Washington D.C.

# Stone, Doris Z.

1950 Notes on Present Day Pottery Making and Its Economy in the Ancient Chorotegan Area. *Middle American Research Records* 1(16):269-280.

# Willey, Gordon R.

Lower Central American Archaeology: Some Comments as of 1991. In *Paths to Central American Prehistory* (Frederick W. Lange, ed.): 297-304. University Press of Colorado, Niwot.