



# THE VULCI 3000 PROJECT, ITALY

*Course ID: ARCH 365AC*

*June 14 –July 18, 2020*

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

***School of Record: Connecticut College***

**FIELD SCHOOL DIRECTOR:**

**Prof. Maurizio Forte**, Duke University, Department of Classical Studies, Art, Art History and Visual Studies ([maurizio.forte@duke.edu](mailto:maurizio.forte@duke.edu))



**Tuition covers accommodations, health insurance, instruction, 8 semester credit units & lunch on work days. Students are responsible for all other meals.**

## INTRODUCTION

Vulci 3000 is a multidisciplinary project of archaeological research involving the use of advanced digital and remote sensing technologies and focused on the Etruscan and Roman site of Vulci (Italy). Vulci (10<sup>th</sup>-3<sup>rd</sup> c. BCE-5<sup>th</sup> c. CE) is located at the Province of Viterbo in central Italy. It was one of the largest and most important cities of ancient Etruria and one of the biggest cities in the 1<sup>st</sup> millennium BCE in the Italian peninsula. The habitation site is a uniquely stratified and mostly untouched urban context that includes, in the same area, Iron Age, Etruscan, Roman and Medieval settlements. It had an area of circa 126 hectares and an estimated population of thousands of inhabitants in the Classical period (6<sup>th</sup>-5th cent. BCE). In 280 BCE, the Romanization of Vulci is the beginning of a new period of transition between the Etruscan and Roman political power and urban management which is documented only by archaeological data. The discovery of Etruscan and Roman cisterns and wells in Duke's ongoing excavation, opens new unexplored research perspectives on one of the most ancient urban water management systems in Southern Etruria. In 2019, more extensive excavations were able to identify a large monumental complex connected with a very sophisticated water system (channels, pipes, wells) possibly identifiably with a sanctuary. Also, several important archaeological finds recall the importance of water in their iconography. Some of these infrastructures will be explored by new rover-robots, specifically designed by Duke students for this excavation.

This project gives new insights into the origin, development and transformation of Etruscan and Roman cities and their surrounding landscape. All these broad research questions have to be correlated with stratigraphic evidence, a general understanding of the urban context and combination of non-destructive techniques with archaeological excavations. All these archaeological and paleo-environmental data will be able to show the diachronic and broad-scale organization of the ancient territory, demography, and city plans in over a thousand years of history.

The 2020 fieldwork season will be focused on the excavations of the above-mentioned “sanctuary” (perhaps Etruscan and finally Roman), all the related infrastructures and the most ancient phases of the Etruscan urban development.

The project involves the collaboration of top international research institutions such as Duke University, Ludwig Boltzmann Institute (Austria), La Sorbonne Pantheon (France), La Sapienza University (Rome, IT), the University of Evora (Portugal) and the University of Modena and Reggio Emilia (Italy).

#### **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**

Prior experience in excavation is preferable, but students interested in digital technologies are welcome to apply. Such students will work primarily in the lab and focused on using digital tools.

Archaeology involves physical work and exposure to the elements and thus, requires a measure of acceptance that this will not be the typical university learning environment. You will get sweaty, tired and have to work in the outdoors. Students are required to come equipped with sufficient excitement and adequate understanding that the archaeological endeavor requires real, hard work – in the sun, on your feet, and with your trowel. Additional guidelines to the 2020 season will be distributed to all the participants.

#### **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. [insuremytrip.com](http://insuremytrip.com) or

[Travelgurad.com](http://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.

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.

Archaeological field work involves physical work in the outdoors. You should be aware that conditions in the field are different than those you experience in your home, dorms or college town. During the day, temperatures in the shadow fluctuate between 70°-80°F and over. However, under the sun they may reach 80°-90°F and over. To be protected from sunburn and local insects, students will not be allowed to work in shorts or tank tops at the site.

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

## COURSE OBJECTIVES

The objective of this field school is to enable students to better understand how classical archaeology is practiced in the field, to study ancient cities and their relation with different societies – in this case the Roman and the Etruscan ones – and finally to provide an advanced training in digital technologies and methods applied to archaeology. These include remote sensing, geophysical prospections, photogrammetry, 3D modeling, robotics, virtual reality, drones, GIS, WEB-GISs and archaeometric analyses. The students will be trained in the field also with the use of Oculus Go, a virtual reality device for the visualization of 360 videos and digital reconstructions.

This field school has the following primary goals: (1) to provide students a practical working knowledge of **archaeological field methods**, including mapping, excavation, laboratory analysis, artifact cataloging, and conservation; and (2) to introduce students to the systematic use of digital technologies in archaeology: data documentation on site, drones, laser scanners, 3D photogrammetry, GPR and virtual reality.

The course will take place in the archaeological park of Vulci (Viterbo, Italy), close to the ancient cities and UNESCO World Heritage sites of Tarquinia and Cerveteri, the most important archaeological sites in Southern Etruria.

Students will participate in the following research activities:

**Excavations:** Participation to the archaeological excavation in the Southern area of the Vulci plateau. The excavation will follow the single context method (Harris matrix), very popular in academic and professional archaeology.

**3D Digital recording:** The archaeological documentation in this program is totally paperless. Students will learn how to record, interpret, classify and map all phases of excavation, as well as finds and artifacts, digitally.

**Cataloging and classification:** Students will participate in field sorting and cataloging of finds from the Etruscan and Roman city.

**Laboratory:** Scheduled lab tasks will include washing, sorting, drawing, and cataloging of finds.

**Drones and remote sensing:** multispectral and professional drones (copters and fixed wings) will be used for the exploration of the archaeological landscape and the creation of georeferenced photoplans of the site.

The fieldwork schedule is from Monday to Saturday morning; (usually) 7:30 am - 5 pm (Mon-Fri); 7:30 am-1:00pm (Sat.). Sundays is free. Lunch break is from 12:30-1:30 pm.

In the first day of fieldwork, a general overview of the site and its cultural context will be provided to the entire group. Special visits to the local necropolis and museums will be organized before and during the fieldwork.

## **LEARNING OUTCOMES**

On successful completion of the field school, students will be able to understand:

- Theory and practice of the archaeological excavation (in this case the “single context method”).
- The complexity of material culture for the interpretation of ancient societies
- The relationships among objects, contexts and sites.
- Diachronic evolution of a Pre-Roman city-State and its transformation in a Roman town
- The identification and classification of Etruscan and Roman archaeological finds in a time frame of 1400 years.
- Mechanics of cultural resource management in relation to a major archaeological park.
- The advanced application of digital technologies for the recording, interpretation and communication of sites. Among them: laser scanners, remote sensing, digital photogrammetry, 3D cameras, drones-robots, rover-robots, total stations, virtual reality systems.
- Chronology, cultural characterization and features of artifacts, finds and monuments;

## **GRADING MATRIX**

**60%:** Excavation and on site documentation

**20%:** Final exam

**20%:** Participate in daily reports and discussions of research activities to the group

## **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 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. 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 will be met by project staff members at train station of Montalto di Castro (Viterbo) around 6 pm on Sunday, on June 14<sup>th</sup>, 2020. The station is easily reachable from the Fiumicino International Airport and from the Roma Termini Train Station.

The field school activities will conclude on the afternoon of July 17, 2020. Students should leave the apartments by 10:00am on July 18 for onward travel or return home.

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 citizens do not need a visa for tourist or study stays of up three months in Italy. Your passport should be valid for at least three months beyond the period of your stay.

Citizens of other countries, please visit the Italian Embassy website at your home country for visa

information.

## **ACCOMMODATIONS & FOOD**

Students will live in apartments in Montalto Marina, a charming seaside town, 15 minutes away from the site. Large, Italian style lunch will be provided daily in the field at a local family own restaurant at the site of Vulci. Students are responsible for their own dinner and breakfast (there are several supermarkets, groceries and bars at a walking distance from the apartments). Students are responsible for their own food on weekends. The accommodation will be in nice and new apartments, fully equipped with kitchen, fridge, washing machines and related tools. All the participants must bring bed sheets and towels.

## **EQUIPMENT LIST**

Students must bring these items to the field. These tools will help in your research and accommodations.

- Safety shoes (steel toe)
- Wide brimmed hat. This type of hat is usually best for outdoor working conditions
- Sunscreen
- Any medication you may need and prescription medication to last for the duration of the field school
- Pointing Trowel - 5" x 2"
- Sun glasses with UV protection
- Insect repellent

## **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.

Because of the complexity of the local environmental conditions and the logistics of the projects (i.e. weather, power outage, lab issues, last minute requirements from the Italian Ministry of Culture, etc.) this schedule can be subject to change.

### **Week 1:**

Sunday 6:00 pm: Pick up for all the participants at the train station of Montalto di Castro (VT).

Monday 7:00 am: Pick-up at the residence  
7:30-9:00 am: Site tour  
9:00 am– 12:30 pm: Orientation, instructions, guidelines.  
12:30 pm: Lunch  
1:30 – 5:00 pm: Lab training and introduction to the excavation

Tuesday-Friday

7:30am – 12:30pm and 1:30 – 5:00 pm: Archaeological excavation and lab activities.  
Lab activities involve: ceramic lab, archaeometry lab and digital lab. Students will rotate in order to attend all the activities.

On Fri. we discuss with all the participants the status quo of the excavation, the main results and open questions

Saturday: 7:30am – 1 pm: Archaeological excavation. Afternoon free.

### **Week 2-5:**

Same daily schedule for the four weeks of fieldwork, Monday through Friday, with half day Saturday.

### **Week 1-5:**

Fri. 4:00 pm: meeting with the IFR tutor. The goal of the meetings is to discuss results, issues and concerns of all the weekly activities, to understand the educational impact and to monitor the interdisciplinary learning of all the students.

### **SPECIAL TRIPS**

Archaeological trips and guided tours to the archaeological sites of Tarquinia (World Heritage Site, necropolis and museum), to the East necropolis of Vulci, other archaeological excavations in Southern Etruria and the National Museum of Vulci will be organized just for the IFR school.

### **LECTURES AND TRAINING**

Lectures on digital and Etruscan and Roman archaeology, GIS, remote sensing, excavation methods and photogrammetry will be scheduled on a weekly basis. Digital training will involve also several field activities with drones and other digital devices.

### **MANDATORY READINGS**

The readings listed below will be posted online for students to access in advance of the project. At the end of each week there will be a discussion session with all students concerning the readings. Additional instructions concerning the excavation database and inventory will be released after the enrollment.

#### **General references:**

(1) **Turfa Macintosh, J.**, *The Etruscan World*, Routledge, 2013;

(2) **Alessandro Naso (ed.)**, *Etruscology*, De Gruyter, 2017

(3) **Susan E. Alcock, Robin Osborne**, *Classical Archaeology*, Wiley-Blackwell, Year: 2012

#### **Weeks 1-2**

**Susan E. Alcock, Robin Osborne 3**, 11-13; 30-50.

**A. Maggiani**, The historical framework, in (2), 537-560

#### **Weeks 3-4**

**Philip Perkins**, The landscape and environment of Etruria, in (2), p. 1239

**V. Jolivet**, *A long twilight (396-90 BC): Romanization of Etruria*, in (1), pp. 151-79.

#### **Week 5**

**McCusker, K. and M. Forte, 2016**, "The Vulci 3000 Project: A Digital Workflow and Disseminating Data," 2016 Chacmool Conference Proceedings.

All the readings and PowerPoint presentations will be shared with the students before the field season. It is mandatory for the participants to give a look to all the readings before the fieldwork since the time on site and after hours is very limited.