

## Dig Site Gives Students Hands-On Experience

Students enrolled in the Maymester course Inca Civilization at the University of Arkansas - Fort Smith visited ancient Inca sites and worked at a dig site in Peru.

Both Kim Gordon of Fort Smith, senior business consultant and management instructor for the Center for Business and Professional Development at UA Fort Smith, and Dr. Argie Nichols of Roland, associate professor of Computer-Aided Drafting and Design, were pleased with this first venture.

When originally contacted, Gordon said the site director at Huaca Pucllana, a burial site dating to 100 B.C., was particularly interested in using ground penetrating radar to help them identify areas where artifacts were believed to possibly exist.

While at Huaca Pucllana, Nichols said the students learned to use GIS, GPS and GPR equipment to develop grids for archeologists and to identify “hot spots” for dig purposes.

“While the archaeologists knew many mummies are still entombed at the site, the use of the GPR equipment in particular permitted the team of students to identify two large areas near the plaza where mass graves are expected to be,” said Nichols. “These graves are believed to be from the Lima civilization and date between 200 and 560 A.D.”

Prior to their work at Huaca Pucllana, the students were guests at the U.S. Embassy and World Trade Center in Lima to gain first-hand knowledge as to the political and economic climates. The students travelled to Cusco, climbed Machu Picchu and Waynapicchu and visited the ruins at Ollantaytambo.



Three of the UA Fort Smith students in the Inca Civilization class (center of photo) are shown in Peru using ground-penetrating radar to locate grave sites. Shown are Ted Dearman (left) and Caine Dearman (right) of Underground Technologies with students Jill Gordon of Fort Smith, Philip Taylor of Magazine (center back with GPS unit) and Adam Auten of Fort Smith. The Peru trip was one of several Maymester classes offered by UA Fort Smith.



Posing in Peru are (front row, from left) professionals on the trip, which included Caine Dearman of Underground Technologies, Huaca Pucllana site coordinator Jose Ccencho Huamani, David Emmanuel Llancari Oliden of Geo Systems of Lima, Robert Martin of Navigation Electronics Inc. and Bruce Cecka of Fox Valley Technical College. Shown (back row, from left) are instructor Kim Gordon, Philip Taylor, Hector Casillas-Rodriguez, Cody Holt, Ann Parent, Chris Venable, Oliver Whitt, Kristine Dickson, Jill Gordon, Adam Auten, Elizabeth Casanova, Tyler Lamon, Bobby Jones, instructor Argie N. Nichols and Heath Cady.

Nichols said this portion of the trip allowed students to experience excavated and well documented sites prior to arrival at Huaca Pucllana, where they implemented technologies never-before-used on the historic archaeological site.

Students Tyler Lamon of Fort Smith and Ann Parent of Fayetteville found the class to be a one-of-a-kind experience.

“The knowledge gained from the professionals, the hands-on experience and the networking opportunities provided by this trip are irreplaceable,” said Lamon.

Parent agreed.

“This was a trip of a lifetime,” she said. “I will forever be grateful for the opportunity.”

Dr. Georgia Hale of Fort Smith, dean of the College of Applied Science and Technology, believes the Maymester class provides an excellent way for students to learn the new technologies.

“And, their multi-city tour allowed students to absorb some of the history and flavor of Peru and its culture,” said Hale.

Through their data collection, the group will create and provide the Huaca Pucllana staff with detailed maps, GPS coordinates, and 3D imaging of the site, its features and excavation "hot spots" discovered through ground-penetrating radar. The project is ongoing with the materials to be delivered to Huaca Pucllana in December.

Gordon said another "hot spot" was found atop the seven-story mound, which is 300 feet across.

“Skeletal remains are visible to the unaided eye atop the mound,” said Gordon. “Remains include human femurs, vertebrae, ribs, skulls and jaws. With the use of the high tech equipment, students located numerous areas on the mound where significant data indicated tombs and other artifacts were likely to be located.”

Gordon said the UA Fort Smith team ingratiated themselves to the site employees.

“In fact, the partnership between the site and the UA Fort Smith team grew exponentially to the point the archaeologists took the students to the private work stations to view the process of artifact recovery, inventory and restoration.”

Gordon added that the work and artifacts haven't been disclosed even to local Limeans.

“Students viewed the intricate works of piecing together fabrics more than a millennia old,” Gordon explained. “The archaeologists also introduced the team to a mummified infant whose many wrappings included a blanket stitched with a monkey motif. The mummy is estimated to be 1,200 years old. The tour was the first viewing of the recovered artifacts by people not employed at the site.”

Gordon said the students are pursuing a wide range of degrees — business, history, biology, education and animation. To prepare for their Peruvian immersion, the group met every other Saturday beginning in January to learn about the economic and political structure of Peru. Studies included the historical and cultural elements, especially as it pertained to Wari and Inca civilizations.

Participants included Kristine Dickson, Cody Holt and Ann Parent, all of Fayetteville; Adam Auten, Elizabeth Casanova, Hector Casillas-Rodriguez, Jill Gordon, Tyler Lamon and Oliver Whitt, all of Fort Smith; Philip Taylor of Magazine; Bobby Jones of Roland; Heath Cady of Van Buren; and Chris Venable of Waldron.

Also making the trip was a group of professionals who assisted the faculty and students with the study. They were Bruce Cecka, surveying instructor from Fox Valley Technical College in Appleton, Wis.; Robert Martin, CADD Advisory Board member for UA Fort Smith and Trimble Sales Representative for Navigation Electronics Inc. of Lafayette, La.; and Caine and Ted Dearman from Undergrounds Technologies from Madison, Miss. The professionals traveled at their own expense and provided equipment and expertise free of charge for the project.

UA Fort Smith offered several Maymester classes, which provide intensive, compact educational experiences that result in college credit for participants. The classes are offered during the period in May between the end of the UA Fort Smith spring semester and the beginning of the first summer term.