

## TCU's AP Summer Institute in Taos NM

Learn to capture the interest of your AP Environmental Science students by designing real world lab activities and lessons using environmental information gathered in the beautiful setting of Taos, New Mexico. This course is designed for **experienced** AP Statistics, AP Biology, and AP Environmental teachers who are ready to get out of the classroom and into the real world to discover possible interdisciplinary topics working with teachers in the field. Local experts will share background information on topics such as sustainability, permaculture, local agricultural production, and invasive species while we test water in the parks or visit an organic farm. All three disciplines will work together to increase content knowledge and generate lessons for the classroom. Suggestions on how to use your local environment to enrich your course and make content topics memorable and entertaining for students will be discussed. Return home with classroom ready lessons, ideas for future interdisciplinary work, and an appreciation for other AP courses.

This institute does not resemble the standard week-long sessions. The usual pile of textbooks and notebook will not be included. Save your luggage room for the following: a TI-84 or similar calculator, USB drive, digital camera, and laptop to gain the maximum benefit from the institute. Bringing along a teacher from your school or area in one of the other disciplines would give you the opportunity to plan a joint lesson to enrich both curriculums.

The final itinerary is pending but in past summers field locations have included Seeds of Change, Earthship Biotecture, Carson National Forest, National Park and Bureau of Land Management locations along the Rio Grande and a possible visit with Matt and Emily Romero at Romero Farms. Fun, informative, and educational.

Note: This session is very appropriate for grant and scholarship money. With a national focus on math and science education and integration, check with your local PTA, teacher organizations, and internet sites for potential funding to defray the cost. This institute does meet the standards of the College Board and earns participants the staff development credit and certificate.

If you have any questions, please contact one of us directly.

TCU Director: [s.harris2@tcu.edu](mailto:s.harris2@tcu.edu)

AP Statistics: [smeltzerpenny@gmail.com](mailto:smeltzerpenny@gmail.com)

AP Environmental Science: [briank514@mac.com](mailto:briank514@mac.com)

AP Biology: [joykillough@gmail.com](mailto:joykillough@gmail.com)

### AP Biology

This is a great chance to refine your inquiry techniques in biology and practice your quantitative skills, while collaborating within an interdisciplinary team. We will apply what we learn from our field experiences to the four Big Ideas to create relevant lessons involving real world situations, concerns, and considerations.

### AP Environmental Science

The goal of the AP Summer Institute in Taos is to reinvigorate experienced AP instructors through a transdisciplinary field experience in a unique geographical, environmental and cultural location. This course is taught as a field course, with fieldwork and light hiking on a daily basis. Daily activities will focus upon the accurate collection, analysis and interpretation of data gathered in a variety of fascinating locations. Participants will have the opportunity to develop curriculum modules on topics such as land use and management, watershed protection, sustainable agriculture, and fire ecology. Taos is a perfect location to evaluate and discuss a wide range of themes pertinent to the evolving AP Environmental Science curriculum.

### AP Statistics

Lessons will be explored for the four basic content areas of statistics (experimental design, probability, descriptive statistics, and inference) with suggestions on how to incorporate what we discover into the AP Statistics curriculum. Participants will learn how to use collected data to make the topics memorable and entertaining for students. Go home with a classroom ready lesson, ideas for future interdisciplinary work, and an appreciation for statistical applications in the important fields of environmental science and biology

## **Details**

Every summer in Taos is different. New teacher participants, varying field work opportunities, different lessons learned. But the one consistent take away each year is that this institute will change the way you teach going forward.

Registration fee: \$785.00 (includes lunches while in the field, instructional materials, a flash drive of materials, and College Board publications.)

Housing: teachers will make their own housing/hotel arrangements. If TCU is able to negotiate a lower housing rate, we will post that information here as it becomes available.

Transportation: Since teachers will be coming from all over the U.S., participants will be responsible for making their own travel itineraries. The institute will be based in Taos, NM and begin at 5:00 p.m. on June 30, 2018. The institute will end the morning of July 5<sup>th</sup>. Participants will get credit for 30 hours.

Itinerary: Our agenda will be finalized and published here once we have confirmations from our proposed field sites.

TCU takes our institute to Taos about once every 5 years. Please join us summer 2018 and help us make this a summer you won't forget.