

University of Nevada, Reno
Department of Geography
Learning in the Woods Science Experience

STUDENT AND PARENT INFORMATION

Congratulations to _____ for being nominated to participate in the University of Nevada, Reno (UNR), *Learning in the Woods Science Experience*, a special program for high school Hispanic students. This information sheet will help you know more about this program, and provide you with the necessary forms to complete your admission process. You must return the 'Parent Permission' form and 'Identification and Emergency Information' form to the program coordinator to be officially accepted into the program. The Parent Permission form and a paragraph of the Identification and Emergency form include legal language, which could not be translated. Please fill out, sign, and mail both forms *within one week* to the Program Coordinator USING THE PRE-PAID AND PRE-ADDRESSED ENVELOPE included in this mailing.

Program Objectives

- 1) To introduce students to what scientists do
- 2) To place students in open learning environments where they can participate in hands-on activities
- 3) To plan future steps for the students to go to college and major in science
- 4) To create a support network for the students at their school, including: peers from this program, older students at the school, and the teachers who participated in the program

This Experience will encourage the understanding that science is important and relevant to the students' lives, so that they may envision themselves in technical professions. Finally, this program will enhance relationships between students and their current science teachers. All students' expenses will be covered. An additional \$100 reimbursement will be sent to each student after he/she attends the course.

Program Activities

The program will occupy a two-day period, from June 16th (Thursday) to June 17th (Friday). Students who are not from Reno will travel to UNR on the afternoon/evening of June 15th (Wednesday), and will travel back home on Friday afternoon/evening. Lodging and meals will be provided. The program involves both teachers and students, and offers laboratory experiences, discussions, and demonstrations with measuring and mapping instruments.

A brief description of the program activities is given below. Hands-on methods will be used for introducing scientific concepts and promoting teamwork. Activities will integrate physical science, biology, geography, and earth science, and will address several of the Nevada Science Standards for 10th-11th graders.

Wednesday, June 15

Out-of-town students arrive at the University of Nevada, Reno (UNR). Students who travel by airplane will be met at the airport, and driven to the UNR campus. Lodging will be provided at a

Residence Hall, two students per room. Dinner will be available at a campus cafeteria, where meals will also be offered during the following two days.

Thursday, June 16

7:00-9:00 am	Breakfast
9:00-10:00 am	Meeting in room 301 of Mackay Science (MS 301). Dr. Biondi will introduce himself to the students and ask the students to introduce themselves. He will then provide a review of tree-ring sampling instruments and concepts, and show a videotape of the previous day's field work.
10:00-noon	Hands-on practice with tree measuring and mapping instruments on campus.
Noon-1:00 pm	Lunch
1:00-2:30 pm	Specimen preparation for laboratory analysis (MS 301,117)
2:30-4:00 pm	Microscope analysis using stereo-zoom binocular microscopes. Identification of wood anatomic features, such as xylem, phloem, parenchyma, etc. Students will sketch and describe what they see (MS 301, 304).
4:00-5:00 pm	Skeleton plotting of tree rings: computer presentation followed by practice on graph paper (MS 301, 304).
5:00-6:30 pm	Dinner
6:30-8:30 pm	Visit to UNR's Fleischmann Planetarium and Science Center.
8:30-10:30 pm	Projection of the movie "Stand Up and Deliver" in multi-media classroom (MS 215)

Friday, June 17

7:00-9:00 am	Breakfast
9:00-10:00 am	Connection between wood anatomy, tree growth, and climate change. Teacher/student presentation of their samples (MS 301).
10:00-10:45 am	Evaluation of experience (teachers and students) and quiz (students only). We will discuss what should be added to the program, what should be discontinued, and what should remain as is. The purpose of the quiz is to see how much the students learned during the program (MS 301).
10:45-noon	Tour of the tree-ring laboratory and of the UNR campus (library, rock display, etc.). Group picture.
Noon-1:00 pm	Lunch
After 1:00 pm	The Experience will conclude with all participants receiving contact information for everyone who participated in the program (i.e., the coordinator, students, teachers, etc.) as well as a certificate of completion. Out-of town students who travel by airplane will be driven to the airport, and escorted to the security entrance.