



## STEM TREK 2021

### Science – Technology – Engineering – Math

The STEM Trek is an exciting program at Philmont Scout Ranch for Scouts and Venturers who have an interest in science and engineering applications in everyday life. Participants will enjoy a 12-day trek through Philmont's 140,711 acres of rugged mountain wilderness in the Sangre de Cristo Range of the Rocky Mountains of northeastern New Mexico.

The STEM trek will offer each participant an in-depth experience in the everyday application of STEM principles in Philmont backcountry program, conservation, and everyday life. The Crew will hike through the Philmont backcountry and experience the unique program opportunities it offers to participants. The Crew will participate in interactive lessons covering some of the following fields of study; physics, chemistry, forestry, astronomy, wildlife management, geology, botany, watershed management, and range management. In addition, to becoming more knowledgeable in the science fields, "Leave No Trace" techniques and principles will be integrated into the curriculum.

During the STEM trek, each crew will spend time participating in diverse STEM discussions and have the opportunity to complete a short-term experiment and explore the scientific method. The lessons and experiences will provide knowledge and skills that can be used at local camps, educational institutions, and in the participant's community when they return home.

STEM Trek participants will work and hike in crews under the leadership of trained instructors, many of whom have academic backgrounds in the science, engineering, math and technology, and/or years of experience working in an outdoor classroom. Crews will be composed of young men and women from across the country. All crew equipment such as tents, cooking gear, and tools will be provided by Philmont and all participants will be covered by campers' insurance.

Philmont Scout Ranch covers 219 square miles, with more than 350 miles of trails. Philmont ranges from 6,500 feet to 12,441 feet in elevation above sea level. Because of the remote location and high elevation participants need to be prepared, both physically and mentally, to handle the challenges of the trek. Philmont experiences a wide variety of weather situations. Participants should be prepared for temperatures ranging from 100°F to 30°F and for extreme weather conditions including heavy rain, hail, and snow. All this adds to the STEM and the Philmont experience.

### REQUIREMENTS

- Be 14 years old by date the program begins, but not yet 18 by the date it ends.
- Be a registered member of the Boy Scouts of America
- Be in excellent physical condition, able to hike 10 or more miles per day with a 50-pound backpack.
- Complete a BSA Annual Health and Medical Record. Philmont height and weight guidelines will be strictly enforced.

### HOW TO APPLY

Complete the following application. Apply early for best consideration. Applications will continue to be accepted until all spaces are filled. Have it approved by a parent or guardian and your unit leader. Philmont will notify you of your acceptance. If accepted, a packet of materials will be emailed in March to assist you in preparing for your Philmont trek experience.

### PROGRAM FEE/SCHOLARSHIPS AND TRAVEL INFORMATION

The fee is **\$1065 in 2021** for the twelve-day experience. **A \$50 non-refundable deposit is required with this application.** The balance of the fee is due at the time of acceptance into the program. Additional expenses, including travel to and from Philmont, as well as miscellaneous purchases, are the responsibility of the participant. Those applicants not accepted will have their deposit returned. Participants canceling acceptance will be eligible for a refund if notification is received at Philmont by May 1. No shows are not eligible for a refund. ***We will accept applications until sessions are filled. Scholarship funds are available on a limited basis, apply using the attached application.***

## **TRAVEL INFORMATION**

Shuttles are available to and from the airports in Albuquerque, NM and Colorado Springs, CO and Denver, CO. The shuttles depart the airport at 1:00 to 3:00 pm, depending on the location, on the day **before** your scheduled start date, arriving at Philmont at 6:30 to 7:00 pm (approx). The return shuttles leave from 6:00 to 7:30 am on your departure date, arriving at the Airports at 9:45 am to 12:00 noon, depending on location. You may also consider the bus or train arrival at Raton, New Mexico (45 miles from Philmont). A roundtrip shuttle is available from Raton. If you do not arrive by shuttle, plan to arrive at Philmont between 8:00 - 10:00 am on your scheduled start date. The Shuttle information/registration forms will be included in your March packet. **Note:** Shuttle times may change so please check shuttle registration forms upon receiving them or call Philmont for updated information. Participants depart the morning of the thirteenth day (June 25, July 27, & August 4 are departure dates).

## **ADDITIONAL INFORMATION**

For additional information about the STEM Trek Program including shuttle arrangements, physical requirements (annual health and medical record questions), equipment needs, and general questions, contact Philmont Scout Ranch at 575-376-2281 or email [camping@philmontscoutranch.org](mailto:camping@philmontscoutranch.org). Information to assist you in preparing for your adventure can be found at <https://www.philmontscoutranch.org/philmonttreks/individualprograms/>

During the dates of the program, contact Philmont Scout Ranch at 575-376-2281, seven days a week, and ask for the STEM Trek coordinator or Camping Registration. During this time, Philmont Logistics will also be able to assist with transportation concerns or problems.

## **STEM TREK DATES FOR 2021**

First Session: **June 13 – 25** Second Session: **July 15 – 27** Third Session: **July 23 – August 4**

**Please Note:** If less than five participants register for a session by May 1, the session may be cancelled. Participants will be promptly notified and alternative programs or dates will be suggested.

## **STEM TREK CODE OF CONDUCT**

The general welfare of any group depends on the conduct of each individual member. This ensures the success of the school project and provides the maximum benefit to every participant. As a STEM participant, I understand this and support the reasonable demands of conduct expected of me.

### **AS A STEM TREK PARTICIPANT, I WILL:**

- Live the Scout Oath and Law
- Observe, respect, and strive to live the Philmont Wilderness Pledge
- Observe the rules of the Philmont Scout Ranch and my Instructors
- Wear my full official BSA uniform or work clothes as required.
- Attend and participate in all functions of the program
- Be personally responsible for damage and loss of property
- Respect all safety procedures and learn to properly use equipment
- Be considerate of participants and staff at Philmont Scout Ranch at all times
- Understand that fighting with another participant or staff member is prohibited and will be grounds for immediate dismissal from the program at the expense of the participant.
- Understand that theft, vandalism, or deliberate destruction of property of other participants or Philmont is not permitted and will result in dismissal from the program at the expense of the participant
- Understand the purchase, possession, or consumption of alcoholic beverages, cigarettes, tobacco, or illicit drugs at any time during the program, will not be permitted and will result in dismissal from the program at the expense of the participant. This standard shall apply to all participants. Compliance with state law regulations will apply at all times.

**By signing along with my parent/guardian on the final page of this application, I acknowledge I have read and promise to abide by the code of conduct for the STEM Trek Program and have read and understand all the information about the STEM Trek Program as listed on this application.**

2021 STEM TREK APPLICATION

(Please type or print clearly)

NAME (first) (middle) (last) EMAIL

MAILING ADDRESS

CITY, STATE, ZIP

HOME # Cell # Parent's Cell #

DATE OF BIRTH\* (\*Must be 14 by program start date, but not 18 by its conclusion)

ADDITIONAL INFORMATION: Gender Age Grade Height Weight male / female inches

MEMBERSHIP #

SCOUTING AND OUTDOOR EXPERIENCE:

Registered with: Troop Team Venture Crew Unit # Tenure Rank (Circle One)

Council Name

Leadership Positions Held

Previous Philmont Experience Year(s)

Other High Adventure Experience / Backpacking Experience (please be specific)

Total no. of backpacking overnights Longest backpacking expedition in: Days Miles

Extracurricular Activities

Honors / Awards Received

Camp Staff Experience (When and Where)

CPR/First Aid Certifications

SESSION: (indicate 1st and 2nd choice) June 13 – 25 July 15-27 July 23-Aug 4

Find Enclosed: \$50 deposit \$1065 (full fee for 12 Day)

Make check payable to Philmont Scout Ranch.

**BEWARE OF POTENTIAL RISKS**

*Philmont offers High Adventure backpacking treks and program activities in relatively inaccessible mountainous terrain. Parents, advisors and youth participants should be alert to the potential for injury.*

*Philmont strives to minimize risks to participants and advisors by emphasizing proper safety precautions. Philmont staff members will instruct you regarding safety measures to be followed. Each participant is expected to follow these safety measures and to accept responsibility for their health and safety.*

**PARENT/GUARDIAN APPROVAL:**

My son/daughter has my complete permission to participate in the STEM Trek Program during the session indicated on this application. I understand that the program is physically demanding and involves a degree of risk and a potential for injury. I along with my son/daughter also acknowledge and agree with the Code of Conduct.

Participant Signature \_\_\_\_\_ Date \_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

**UNIT LEADER APPROVAL:**

I attest this applicant is a member in good standing and approve his/her participation in the STEM Trek

Unit Leader Signature \_\_\_\_\_ Date \_\_\_\_\_

**FEE SCHEDULE:**

\$1065 in 2021, for the 12-day program. A \$50 deposit must accompany this application. The remaining balance will be due upon receipt of confirmation.

**NOTE: A deposit fee must accompany application along with all required signatures.**

Please make check payable to Philmont Scout Ranch and mail to:

**PHILMONT SCOUT RANCH  
ATTN: STEM  
17 DEER RUN RD.  
CIMARRON NM 87714**

**Philmont Contact Information: Phone: 575.376.2281**

**Email: [camping@philmontscoutranch.org](mailto:camping@philmontscoutranch.org)**

**Web Address: [www.PhilmontScoutRanch.org](http://www.PhilmontScoutRanch.org)**



## HIGH ADVENTURE RISK ADVISORY

**Philmont Scout Ranch Experience.** The Philmont experience is not risk-free. Staff will instruct participants in safety measures. Be prepared to listen to and follow these measures. Accept responsibility for the health and safety of yourself and others. Each participant must be able to carry 25 to 35 percent of their body weight while hiking 5 to 12 miles per day in an isolated mountain wilderness ranging from 6,500 to 12,500 feet in elevation over trails that are steep and rocky. Summer/ autumn climate includes temperatures from 30 to 100 degrees, low humidity (10 to 30 percent), and frequent, sometimes severe, thunderstorms. Winter climatic conditions can range from -20 to 60 degrees. During a Winter Adventure experience, each person will walk, ski, or snowshoe along snow-covered trails pulling loaded toboggans or sleds for up to 3 miles—or even more on a cross-country ski trek.

**Risk Advisory.** Philmont has an excellent health and safety record and strives to minimize risks to participants by emphasizing appropriate safety precautions. Because most participants are prepared, are conscious of risks, and take safety precautions, they do not experience injuries. If you decide to attend Philmont, you should be physically fit, have proper clothing and equipment, be willing to follow instructions, work as a team with your crew, and take responsibility for your own health and safety.

Philmont staff members are trained in first aid, CPR, and accident prevention. They can assist the adult advisor in recognizing, reacting to, and responding to accidents, injuries, and illnesses. **Each crew is required to have at least two members trained in wilderness first aid and CPR.** Response times can be affected by location, terrain, weather, or other emergencies and could be delayed for hours or even days in a wilderness setting.

All Philmont participants should understand potential health risks inherent at or above 6,700 feet in elevation in a dry Southwest environment. High elevation; a physically demanding high- adventure program in remote mountainous areas; camping while being exposed to occasional severe weather conditions such as lightning, hail, flash floods, and heat; and other potential problems, including injuries from tripping and falling, falls from horses, heat exhaustion, and motor vehicle accidents, can worsen underlying medical conditions. Native wild animals such as bears, rattlesnakes, and mountain lions usually present little danger if proper precautions are taken.

Please call Philmont at 575-376-2281 if you have any questions. All participants and guests should review all materials and websites related to the experiences they are planning to have at Philmont Scout Ranch.

### PHILMONT WEIGHT LIMITS FOR BACKPACKING AND HIKING

Weight limit guidelines are used because overweight individuals are at a greater risk for heart disease, high blood pressure, stroke, altitude illness, sleep problems, and injury. These guidelines are for all Scouting high-adventure activities. Each participant's weight must be less than the maximum acceptable limit in the weight chart. Participants 21 years and older who exceed the maximum acceptable weight limit for their height at the Philmont medical recheck WILL NOT be permitted to backpack or hike at Philmont. They will be sent home.

For participants under 21 years of age who exceed the maximum acceptable weight for height, the Philmont staff will use their judgment to determine if the youth can participate. Philmont will consider up to 20 pounds over the maximum acceptable; however, exceptions are not made automatically and discussion with Philmont in advance is required for any exception. Philmont's telephone number is 575-376-2281. Due to rescue equipment restrictions and evacuation efforts from remote sites, under no circumstances will any individual weighing more than 295 pounds be permitted to participate in backcountry programs.

**Philmont Approval.** Staff and/or staff physicians reserve the right to deny the participation of any individual on the basis of a physical examination and/or medical history. Each participant is subject to a medical recheck at Philmont.

**Height/Weight Restrictions.** If you exceed the maximum weight for height as explained in the following chart and your planned high-adventure activity will take you more than 30 minutes away from an emergency vehicle/accessible roadway, you may not be allowed to participate.

#### Maximum Weight for Height:

Height(inches)	Max Weight	Height(inches)	Max Weight	Height(inches)	Max Weight	Height(inches)	Max Weight
60	166	65	195	70	226	75	260
61	172	66	201	71	233	76	267
62	178	67	207	72	239	77	274
63	183	68	214	73	246	78	281
64	189	69	220	74	252	79 & over	295

This table is based on the revised Dietary Guidelines for Americans from the U.S. Dept. of Agriculture and the Dept. of Health & Human Services.

A water-displacement test to determine percent body fat will also be accepted in lieu of the height-weight guidelines. Women will need to have a body fat of 20% or less and men will need to have a body fat of 15% or less to be qualified to participate. No other form of test to determine percent body fat (DEXA scan, skin fold, etc.) will be accepted by Philmont.

## FINANCIAL ASSISTANCE APPLICATION

A limited amount of financial assistance is available for Rayado, ROCS, STEM, or TCT participants. To apply, please complete this application and return it to Philmont by February 1 of the year attending. All information will remain confidential.

\*\*\*\*\*

NAME \_\_\_\_\_ BIRTHDATE \_\_\_\_\_ AGE \_\_\_\_\_  
                    First                      Middle I.                      Last

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

COUNCIL NAME \_\_\_\_\_ UNIT # \_\_\_\_\_

\*\*\*\*\*

\* How long have you been a member of the Boy Scouts of America? \_\_\_\_\_

\* Leadership position(s): \_\_\_\_\_

\* Local council camp experience (where & when): \_\_\_\_\_

\* Philmont experience: \_\_\_\_\_

\* Other high adventure experience: \_\_\_\_\_

\* Honors/awards (school, etc.): \_\_\_\_\_

\* Attach an essay that will help the scholarship committee understand your hopes and expectations if accepted as a participant. Please address the following topics directly: 1) What previous experiences have you had that will help you meet the challenges of this program? 2) What do you hope to learn or accomplish through this experience? 3) How will this experience help you in future service to Scouting; in pursuing other educational, career, or life interests? 4) What will be your greatest contribution (skill, talent, character trait) as a participant of this trek.

### Parent/Guardian Information:

Father \_\_\_\_\_ Employer/Occupation \_\_\_\_\_

Mother \_\_\_\_\_ Employer/Occupation \_\_\_\_\_

State circumstances that require you to apply for financial assistance: (attach additional page if needed)

\_\_\_\_\_  
\_\_\_\_\_

### Amount of fee to be paid by:

Participant                      \$ \_\_\_\_\_

Family                            \$ \_\_\_\_\_

Unit or  
Chartered Partners            \$ \_\_\_\_\_

Total Available                \$ \_\_\_\_\_

Financial Assistance  
Requested                        \$ \_\_\_\_\_

### Signatures required:

Participant \_\_\_\_\_

Parent/Guardian \_\_\_\_\_

Unit Leader \_\_\_\_\_

Date \_\_\_\_\_

**SCHOLARSHIP APPLICATION DEADLINE: FEBRUARY 1**

**INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED**