

STEM TREK 2022

Science – Technology – Engineering – Math



The STEM Trek is an exciting program at Philmont Scout Ranch for Scouts 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 can 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 is comprised of 140,711 acres (219 square miles) of rugged mountain wilderness in the Sangre de Cristo Range of the Rockies. Philmont has over 350 miles of trails throughout the ranch. Philmont ranges from 6,500 feet to 12,441 feet in elevation above sea level. Because of the remote setting and 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 100-degree days, 40 degree nights, as well as days of rain and even snow. All this adds to the STEM and 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 in a Scouts BSA Troop, Venturing Crew, Ship, or Post
- Be in excellent physical condition, able to hike 10 or more miles with a 40-50 lb. backpack. (Philmont height and weight guidelines will be strictly enforced.)
- All participants in backcountry programs are required to have a current BSA Health and medical form completed within 12 months of their arrival at Philmont. The Annual Health and Medical Records part A, B, and C must all be completed, and Part C must be signed by a MD, DO, PA, or NP.

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 **\$1,295 in 2022** for the twelve-day experience. **A \$150 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 from the Albuquerque, New Mexico and Colorado Springs and Denver, Colorado Airports to Philmont. 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 approximately 6:30 to 7:00 pm. 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 — 11:00 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.

ADDITIONAL INFORMATION

For additional information about the STEM Trek Program such as shuttle arrangements, physical requirements (BSA Annual Health and Medical Record), equipment needs, and hiking questions, contact Philmont Scout Ranch at 575-376-2281 or email camping@philmontscoutranch.org. Another source of information to assist you in preparing for your adventure can be found at <http://www.philmontscoutranch.org>.

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

STEM TREK DATES FOR 2022

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

Please Note: If fewer 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 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.

2022 STEM TREK APPLICATION

(Please type or print clearly)

NAME _____ Email _____
(first) (middle) (last)

Mailing Address _____

City, State, ZIP _____

Home # _____ Cell # _____ Parent's Cell # _____

Date of Birth* _____ (*Must be 15 by program start date, but not 21 by its conclusion)

Additional Information: Gender _____ Age _____ Grade _____ Height _____ Weight _____
male / female inches

BSA Registration #: _____

SCOUTING AND OUTDOOR EXPERIENCE:

Registered with: (Check One)
 Troop Venture Crew Post Ship Unit # _____ Tenure _____ Rank _____

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

Please Note: If fewer than six participants register for a session by April 1, the session may be cancelled. Participants will be promptly notified, and alternative programs suggested.

Find Enclosed: \$150 deposit
 \$1,295 (full fee for 12-Day Trek)

(Check payable to Philmont Scout Ranch)

I request a vegetarian meal plan: Yes No
I request a special diet meal plan: Yes No

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 a Rayado Trek 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 Rayado program.

Unit Leader Signature _____ Date _____

FEE SCHEDULE:

The **fee is \$1,295 for 2022**. A \$150 deposit must accompany this application. The balance is due when the applicant is accepted into the program.

NOTE: A deposit fee, all required signatures of approval and a letter of recommendation must accompany your application.

Please make check payable to Philmont Scout Ranch and mail to: **PHILMONT SCOUT RANCH
ATTN: STEM TREK
17 DEER RUN RD.
CIMARRON, NM 87714**

**Philmont Contact Information: Phone: 575.376.2281
Email: camping@philmontscoutranch.org**

Web Address: 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 in your crew. Each participant must be able to carry 25 to 30 percent of their body weight while hiking 5 to 12 miles per day in an isolated mountain wilderness ranging from 6,500 to 12,000 feet in elevation over trails that are steep and rocky. Weather during summer and autumn includes temperatures from 30° to 100°F, low humidity (10 to 30 percent) and frequent, sometimes severe thunderstorms.

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.

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 the Philmont Infirmary 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. Any exceptions to Philmont's medical requirements must be approved by the Philmont Infirmary in advance of arrival at Philmont.

PHILMONT WEIGHT LIMITS FOR BACKPACKING AND HIKING

Participants on Philmont Backcountry programs must meet the established height and weight guidelines. These guidelines are strictly enforced and failure to meet these guidelines will result in you not being able to participate. These guidelines are enforced because overweight individuals are at a greater risk for heart disease, stroke, and injury. Each participant must be no more than the maximum acceptable weight limit for their height on the chart below. Due to the limitations of rescue equipment and evacuation efforts from remote sites, no one over 295 pounds will be permitted to participate.

Philmont does not have a lower weight limit, but all participants must be able to carry all the required equipment without exceeding a pack weight of 30% of their body weight.

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.

YOUTH HEIGHT/WEIGHT CHART

| Height (inches) | Max. Weight |
|-----------------|-------------|
| 60 | 166 |
| 61 | 172 |
| 62 | 178 |
| 63 | 183 |
| 64 | 189 |
| 65 | 195 |
| 66 | 201 |

| Height (inches) | Max. Weight |
|-----------------|-------------|
| 67 | 207 |
| 68 | 214 |
| 69 | 220 |
| 70 | 226 |
| 71 | 233 |
| 72 | 239 |
| 73 | 246 |

| Height (inches) | Max. Weight |
|-----------------|-------------|
| 74 | 252 |
| 75 | 260 |
| 76 | 267 |
| 77 | 274 |
| 78 | 281 |
| 79 and 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.

INDIVIDUAL TREKS 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 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 _____

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED
SCHOLARSHIP APPLICATION DEADLINE: FEBRUARY 1