SAN LUIS VALLEY 4-H ROBOTICS

SLV 4-H ROBOTICS
Program Overview & Expectations

Program Overview

WHAT: SLV 4-H Robotics is an out-of-school program where youth learn robotics, engineering, and programming by working on teams to complete hands-on robotics challenges using LEGO Mindstorms EV3 robotics kits. Field trips and local and regional competitions help provide additional enrichment for team members.

WHO: The program is open to youth ages 8-18, who are able to work productively on a team composed of 2 to 4 youth.

WHERE: Teams meet in various locations throughout the Valley. Attempts are made to get kids on a team that meets close to their home, but that is subject to availability of team slots and coaches. Monthly challenges are typically held in Alamosa.

WHEN: The SLV 4-H Robotics regular season runs November to May and the summer season runs from June to August. Teams meet at least once a month at a time convenient to them and their coach. In addition they compete in monthly challenges, typically held the 1st Saturday of the month (December-March) and other contests and events (see tentative schedule for more information). There is a time commitment of at least 2 hours per month in team meetings (though many teams meet more than once a month), and 3 hours per month for challenges.

WHY: In this program, youth strengthen their abilities in Science, Technology, Engineering and Math (STEM) by working on construction, troubleshooting and programming. They also improve life skills such as problem solving, teamwork, and communication. Above all though, the program is a whole lot of fun!

General Information & Participant Expectations

- Youth must be able to work well with others, and be respectful to other members, competitors, volunteers, and the actual robotics materials. This program also requires participants to exercise patience, as robotics inherently involves lots of troubleshooting. Youth who are frustrated easily may not do well in this environment.
- Youth must be able to attend 75% of monthly meetings and challenges (see calendar for dates). In addition, at least one member per team is expected to participate in the SLV Fair Challenge and RoboRAVE Colorado.
- Parents must understand that communication for the program is primarily conducted via email. If your family doesn't check email regularly, and can't respond to email in a timely manner, you should not participate in this program. We do not make reminder phone calls to families about meetings or events.
- Each team sets their own meeting schedule based on the availability of their members and coach. Generally, the program administrator tries to match kids up with other youth who have similar availability. Adults are asked to help communicate with each other to set up meetings at times that work for their kids and coach. Parents are expected to get kids to meetings and events and pick them up in a timely manner (they do not need to be present during meetings).
- Youth who are already friends or have worked well together in the past tend to make for more

successful robotics teams. While we do form teams of kids who are strangers, we encourage youth to identify friends who might make good teammates, when possible.

- Youth members are expected to join the 4-H program each year that they participate in the SLV 4-H Robotics program (see the cost section for more information).
- Spots in the program are limited by the number of robotics kits we have and the availability of adults to serve as coaches. We are always looking for adults willing to coach. No experience is necessary, as program staff will provide training and assistance.
- New teams are looking for laptops that they can borrow for use during meetings. If your family is willing to lend your laptop, let program staff know.
- Monthly challenge events typically run from 10 am to 1 pm. Adults should consider sending lunch or a snack with their child to these events. Alternately, they can bring a lunch around noon and stay for the actual contest portion of the event, which typically runs the last 30 minutes.

Program Costs

SLV 4-H Robotics members must join the 4-H program, which costs $30 per year ($25 member fee, and $5 Robotics project fee). Youth who are already 4-H members who have already paid their member fee just pay the project fee. These costs help cover program material and administration fees, and allow for small prizes for the monthly challenge events. Financial assistance is available to families who need it. Contact program staff for information.

In addition to the general participation fee, a number of events that kids participate in throughout the year have nominal fees. The RoboRAVE Colorado competition and Fair Challenge typically cost $5-10 per participant. These events are mandatory for teams to participate in (though all members don't have to be present). There are additional opportunities for youth that we encourage participation in, including the RoboRAVE USA event, held each May in Albuquerque. This event costs $100 per team for registration, and typically involves at least one night at a hotel, in addition to food and gas. Teams and families are responsible for all costs associated with these optional contests and events. Teams may choose to complete fundraising to help cover costs.

About San Luis Valley 4-H

SLV 4-H Robotics is a program of the San Luis Valley 4-H program. 4-H is a youth development program run by Colorado State University Extension. It provides youth with valuable life skills through hands-on experiences in community clubs, afterschool programs and other outreach efforts. The program empowers youth to reach their full potential, working and learning in partnership with caring adult volunteers. Learn more about the local program on our website: http://sanluisvalley.colostate.edu/

Interested in participating?

Fill out a new member interest form and return it to program staff. If you are willing to serve as a robotics coach please contact the program director.

Have questions?

Contact Amy Henschen, program director, at amy.henschen@colostate.edu or 719-852-7381.

Colorado State University