

WELCOME!

Thank you for participating in the 2026 Longs Peak Science and Engineering Fair (LPSEF)!
This guide provides information about the fair, project information, and participant expectations!

Please read through this guide and reach out to LPSEF@unco.edu with any questions you may have!

DIRECTOR CONTACT INFORMATION

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GENERAL FAIR INFO

EVENT INFORMATION

When: Thursday, February 11, 2027; 7:30AM-6PM
Where: Multipurpose Room & Lobby, Campus Commons, University of Northern Colorado
Schedule:

- 7:30-8:30 AM – Check-In, Poster Set-up, and Safety Checks, UNCO Campus Commons Lobby
- 9:00 AM – Welcome and Opening remarks by LPSEF Director, UNCO Campus Commons Multipurpose Room
- 9:00 AM-1:00 PM – Judging of all categories, UNCO Campus Commons Multipurpose Room
- 1:00-2:00 PM – Lunch (provided in registration fee), UNCO Campus Commons Lobby
- 2:00-4:00 PM – Tours & Demos, TBD
- 4:30-5:15 PM – Awards Ceremony, UNCO Campus Commons Multipurpose Room
- 5:30-6:00 PM – Briefing with State Qualified Participants, UNCO Campus Commons

WHAT TO BRING WITH YOU?

- Project poster board (set up on trifold poster board) - see details below
- Project notebook, including the following:
    - Project abstract
    - Signed Human Consent Forms (if applicable)
- An excited and fun attitude, ready to present 😊

PAYING FOR SCIENCE FAIR

Once you have turned in forms and registered, please pay fair dues ($35 for each participant) here: https://unco.estore.flywire.com/products/longs-peak-science-and-engineering-fair-74651

Fees will not be refunded if participants choose to leave or are dismissed from the fair.

BEING A SCIENCE FAIR PARTICIPANT

By researching, preparing, and participating, you are working to become the next generation of STEM professionals. Your participation is instrumental in the success of the science fair; it's what we are all here for! Please remember every student here is interested in science and has tried their best and their effort deserves celebration at the fair. All students will be at different skill levels, from first-time participants to returning state participants. Please be respectful of their time, work, and materials!

NORMS AND EXPECTATIONS

As a participant, you are expected to participate fully in the fair and be an engaged member of the LPSEF community. We want you to have fun, present your work, and be safe. By joining us, you agree to adhere to the norms and expectations outlined in this guide.

We all want to have an enjoyable fair experience - please adhere to the following fair norms:

- respect others (including other participants, judges, and staff)
- present your own work and acknowledge when using the work of others
- stay in the designated fair area (do not wander around campus without supervising adult)
- be mindful of time and the fair schedule
- keep an open mind (your will receive feedback from judges – use this as a tool to grow and improve!)

There are some unacceptable behaviors that will lead to immediate dismissal from the fair. If dismissed from the fair, fees *will not* be refunded, and supervising adults will be required to organize transportation from campus. As appropriate, the UNC police will also be notified. Example behaviors include:

- the possession or use of a weapon (including knives or guns) or any illegal substance (including alcohol, tobacco, and marijuana)
- harassment (emotional, physical, or sexual)
- violence
- theft
- destruction of property
- sexual activity
- disrespect or threatening behavior to staff or peers

LPSEF PROJECT INFORMATION

PROJECT DISPLAY GUIDELINES AND SAFETY

To align with Colorado Science and Engineering Fair (CSEF) standards, LPSEF Display & Safety Inspectors will be evaluating ALL project materials. Please review this list of restrictions and plan your exhibit accordingly (based on CSEF standards):

Physical Exhibit Size

The dimensions of ALL project materials *may not* exceed 240cm high, 122cm wide and 76cm deep and nothing can be set in front of the table (on the floor or on additional table/props).

Photographs/Images

1) ALL graphics that are created by the Finalist MUST BE properly cited individually using statements such as “Photo taken by Finalist, : Image created by Finalist using . . .”, Graph created by Finalist using . . .”, Chart created by Finalist using . . . “, or “Data Table created by Finalist.”
2) ALL graphics not created by the finalist(s) MUST BE properly cited individually (APA format is preferred). If the graphic was obtained via the internet, then a URL must be provided (digital object identifiers are acceptable in place of long URLs). This applies even if the license under which the graphic was obtained does not require credit or citation.
3) Citations must be provided alongside the graphic or in a vertically displayed reference list.
4) Photographs may not be offensive or inappropriate in nature. This includes, but is not limited to, images/photographs showing invertebrates, vertebrates or humans in surgical, necrotizing dissection or distressing situations.
5) Photographs or images of people other than the Finalist need to have a signed photo/video release form from those individuals in a notebook. These signed release forms must be available

upon request during the set-up and inspection process, but may not be displayed. Sample release text: "I consent to the use of visual images (photos, videos, etc.) involving my participation/my child's participation in this research."

6) Finalists using any digital display/device outside of a project board must be prepared to show these materials in their entirety. All aforementioned rules regarding photos, images, data tables, graphs and charts apply to these materials. These materials may not be altered in any way after the Display & Safety inspection has been completed. Examples include, but are not limited to, PowerPoint, Prezi, Canva, BioRender, computer code, Keynote, software program/simulation and other image and/or graphics displayed on a screen.

Items NOT Allowed to be Displayed within the Project Material

1) Biological materials (living, dead or preserved) other than those commercially available. This includes, but is not limited to:
    - Living organisms, including plants
    - Taxidermy specimens or parts
    - Preserved vertebrate or invertebrate animals
    - Human or animal food
    - Human/animal parts or body fluids (for example, blood, urine)
2) All chemicals, including water. Absolutely no liquids can be utilized in the Project Display.
3) All other hazardous substances or devices including but not limited to:
    - Soil, sand, rock, cement and/or waste samples
    - Poisons
    - Drugs
    - Lasers and laser pointers
    - Firearms, weapons, ammunition, reloading devices
    - Granules or powders
    - Grease/Oil and sublimating solids such as dry ice
    - Sharp items (for example, syringes, needles, pipettes, knives)
    - Glass
    - Flames and highly flammable materials
    - Batteries with open-top cells or wet cells or battery packs over 100 watt-hour capacity
    - Drones or any flight-capable apparatus unless the propulsion power source is removed
    - Inadequately insulated apparatus capable of producing dangerous temperatures
4) Any apparatus with belts, pulleys, chains, or moving parts with tension or pinch points that are not appropriately shielded
5) Items that may have contained or been in contact with hazardous substances
6) Any display items that are deemed distracting including but not limited to:
    - Sounds
    - Lights
    - Odors
7) Any apparatus or project material deemed unsafe by the Longs Peak Science & Engineering Fair officials.

PROJECT EVALUATION GUIDELINES

The guidelines used to evaluate projects at the LPSEF align with the CSEF-level standards. This sets you up for success as you move on to higher levels of competition.

EVALUATION CRITERIA

The six criteria for evaluation are detailed below. Each criterion will be evaluated on a 10-point scale, with 1 being the lowest and 10 being the highest.

POINT SCALE

- 1-4 Developing
- 5-6 Proficient
- 7-8 Advanced
- 9-10 Exemplary

1) RESEARCH QUESTION

- Question/Problem is clearly stated
- Question was sufficiently limited to allow a solution to be found
- Question is testable using the scientific research process
- Originality in question asked
- Research addresses a meaningful problem

2) DESIGN AND METHODOLOGY

- A procedural plan was in place for obtaining a solution/answer
- Project demonstrates a well-designed plan and method for data collection
- Variables were clearly recognized and defined
- If controls were necessary, the student recognized the need and used them correctly
- Student(s) had the required laboratory, computation, observational, and design skills to obtain supporting data
- The purpose was carried out to completion within the scope of the original intent

3) EXECUTION

- There was adequate data to support the conclusions
- There was adequate assistance from parents, teachers, scientists, etc.
- The time spent on the project was appropriate
- Project contains sufficient data collected to provide evidence to support the interpretation
- Student made recommendations for future research

4) CREATIVITY

- The project shows creative ability and originality in the questions asked, the approach to solving the problem, the analysis of data, or the interpretation of the data
- The student's findings help to answer their question in an original way
- The student's findings promote an efficient and reliable method for solving a problem

5) POSTER

- Student demonstrates an understanding of the project, which is reflected in their written materials

- Important phases of the project are presented in a logical and orderly manner
- Data is clearly and correctly presented
- Results and conclusions are clearly presented
- Graphics, legends, and supporting documentation are clearly presented

6) INTERVIEW

- Student exhibits clear, concise, thoughtful responses to questions
- Student demonstrates an understanding of the interpretation and limitations of the results and conclusions

GUIDE FOR BEING INTERVIEWED

The interview allows you) to a) present your work in your own way and b) permits the judges to, by asking specific questions, review the work done and determine your understanding of the field.

All participants should be able to answer variations of the following questions:

- How did you come up with the idea for this project?
- What did you learn from your background search?
- How did you build the apparatus? How long did it take?
- How much time (many days) did it take to run the experiments/collect each data point?
- How many times did you run the experiment with each configuration?
- How many experiment runs are represented by each data point on the chart?
- Did you take all data (run the experiment) under the same conditions (e.g., at the same temperature, time of day, lighting conditions)?
- How does your apparatus (equipment, instrument) work?
- What do you mean by (terminology or jargon used by the student)?
- How can your experiment be applied to everyday life or industry?
- Were there any books that helped you do your analysis?
- When did you start this project? or, How much of the work did you do this year? (Some students bring last year's winning project back, with only a few enhancements.)
- What is the next experiment to do in continuing this study?
- Are there any areas we have not covered that you feel are important?
- What is something you learned during this project?
- Why is your project/experiment important?
- What do you think would have happened if…?

Engaging in the Discussion

- Judges might be intimidating, but remember, you've already put in the hard work to be here!
- Here are some strategies you can focus on to feel less nervous and to facilitate a better discussion:
    - Practice before the day of the science fair
    - Use a tone of voice that indicates interest, enthusiasm, and confidence.
    - Include pauses and breaths in your presentation
    - Make eye contact with the judge(s)
    - Smile
    - Most importantly – be yourself and show your personality!

- While being judged, you (the participant) should be doing most of the talking. But be sure to allow opportunities for the judges to ask questions while you talk!

RECEIVING FEEDBACK

- Judges will provide written feedback that the director will send after the fair.
- Remember, this feedback is to help you as you move forward with the science fair.

REGISTRATION & WAIVERS

Please register for LPSEF on MySciFair with your parent/guardian, sign the waiver indicating that you have read, acknowledge, and agree to the policies and procedures for participation in the Longs Peak Science and Engineering Fair, and sign other required waivers. If you have any questions or concerns regarding the procedures outlined in this manual or the program, please contact LPSEF Director, Dr. Victoria Duncan (LPSEF@unco.edu).

Good luck, and thank you for your hard work as a scientist! 😊

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