

High School Science Pitch (HSSP)

Providing equity in STEM competitions.

Core Rules of Competition

HSSP is a STEM competition for high school students enrolled in 9th-12th grade who have conducted a project in any STEM field. The goal is to promote equity, creativity, and confidence in science.

Partner or group projects:

Group projects with a maximum of 3 team members can be presented at HSSP. If so, the team should choose 1 team representative for both rounds 1 and 2. The team representative should be the same person for both rounds. The team representative in both rounds should begin their pitch/presentation by declaring that they are a team project, along with the names of the other team members. All group members should sign up for an account and fill out the participation form, but the group project should only be entered into the competition once by the team representative.

Participant/Judge eligibility rules:

1. Students:
 - a. The student is enrolled in grades 9 to 12.
 - b. The student has conducted an independent/mentored project.
2. Judges:
 - a. Must not be a parent/mentor of a competing participant.
 - b. Must declare that judging decisions made are solely based on merit and free from any external factor.

Judge requirements:

1. If volunteered to judge round 1:
 - a. Required to judge at least 5 video submissions (approximately 15 minutes) and are strongly encouraged to judge as many as possible to help make this competition possible.

- b. Must judge based on the provided rubric and not on personal opinions. Should not be overly critical/lenient to ensure fairness and help foster confidence.
2. If volunteered to judge round 2:
 - a. Should be able to dedicate a whole school day of time to the competition date and be in the video meeting during students' presentations for the judging process.
 - b. Should actively listen to students' presentations and check the rubric.
 - c. Must judge based on the provided rubric and not on personal opinions. Should not be overly critical/lenient to ensure fairness and help foster confidence.

Judges should not judge based on one's dress or external factors other than their presentations and projects. Please do not go over time during the 5-minute maximum Q&A. Do not ask questions that are overly aggressive or irrelevant to the student's work. During presentations, communication points should not be based on how the student speaks but rather on what they speak. Please do not act or look aggressive, as the goal is to foster passion and confidence in science. Judges should not disclose decisions or scores to students unless otherwise stated so.

Six Categories of Competition:

Competing students should select the category that best suits their project. The judging rubric remains the same for all the sciences (i.e. astronomy, biology & medicine, chemistry, and environmental science) but different for the remaining categories (i.e. math & engineering, and computer science). Make sure to check the rubrics and then determine which category to compete in.

1. Math & Engineering
2. Astrophysics
3. Computer Science
4. Biology & Medicine
5. Chemistry
6. Environmental Science

Plagiarism:

Competing projects should be conducted by the students themselves, and if mentored, should clearly state what roles the student has taken. Students are prohibited from plagiarizing other people's projects and published research.

Project eligibility:

All HSSP applicants should state what outside assistance they received. Projects involving vertebrate animals or human subjects must be conducted under the direct supervision of a qualified teacher, parent, or mentor with an approved active protocol that complies with local, state, or federal regulations for such research.

Judging process:

Judging decisions are made solely based on the rubric for the first round of competition (elevator pitch). Each video submission will be judged by at least 3 judges to ensure fairness. The judges will not know the other judges' decisions and grading for each submission. For the second round (live presentation), students will give a 5-10 minute presentation in a video meeting with 3 or more judges (depending on availability). After the presentation and Q&A, students should leave the meeting the the judges can choose to discuss with other judges or make the decision by themselves. For this round, the judges will be the same for all participants to ensure fairness.

Student suggestions:

Students should prepare their video submission/live presentation according to the provided rubric. Make sure to be concise in the video submission due to the 3-minute maximum video length. During the first round (elevator pitch), make sure to demonstrate to the judges that you understand what you are saying and the scientific process, as well as stress out your creativity and simplicity (if applicable). Formal dressing is highly recommended for both rounds but will not affect the judging decision.

For round 2 (live presentation), make sure to follow proper etiquette and be polite to the judges. This is the time to truly dive deep into your project during the 10-minute maximum time limit

and the 5-minute maximum Q&A. Remember, you are the expert. No one knows as much about your research investigation as you. Therefore, remember to explain your research in enough detail so the audience will understand what you did, how you did it, and what you learned. Whenever possible, avoid jargon or unnecessary terminology. If it is essential to use specialized terms, remember to explain the specialized term briefly. Give your audience enough time to understand what you are trying to convey. Graphs, tables, and other representations help explain your results. Keep them simple and uncluttered. Focus on important information; for example, remember to name the variables on both axes of a graph, and state the significance of the position and shape of the graph line. Deliver your presentation at a comfortable pace. It helps to practice your presentation before a nonspecialized audience. Practice will help perfect the presentation and the timing.

Presentation requirements:

At the 12-minute point, the student speaker must stop the presentation even if he or she has not finished. Following the presentation, judges should begin asking questions. Questions intended to harass the student speakers will not be allowed. The speaker should repeat a question before answering.

Scoring guidelines:

The judging rubrics are available at: hs-sp.org → Competition → Rubrics