

Georgia Junior Science & Humanities Symposium

2026-2027 RULES & GUIDELINES



About JSHS

Junior Science & Humanities Symposium (JSHS) is a Department of War sponsored program for high school students enrolled in grades 9-12 who engage in research investigations in the sciences, technology, engineering, or mathematics (STEM). Students are invited to compete in a their affiliated JSHS regional symposium and may win scholarships and/or the opportunity to advance to the National JSHS, held April 20-25, 2027 in Chantilly, VA.

The primary aims of JSHS are to encourage original research and experimentation in STEM and to publicly recognize students for outstanding achievement. By connecting talented students, their teachers, and research professionals at affiliated symposia and by rewarding research excellence, JSHS aims to widen the pool of trained talent prepared to conduct research and development vital to our nation.

Georgia JSHS

Georgia's regional JSHS program is administered by the Office of Academic Special Programs (OASP) at the University of Georgia Center for Continuing Education & Hotel, a unit of Public Service & Outreach. OASP seeks to equip Georgia's pre-college students to succeed and flourish in an increasingly complex and highly technical world by becoming problem solvers, critical thinkers, inquirers, and productive and influential members of their communities.

Participation in Georgia JSHS is by invitation only. To be selected, students submit a research paper, abstract, and Statement of Outside Assistance form. Applications are reviewed by a team of STEM researchers and industry professionals. Based on this review, 45-50 students are invited to participate in the JSHS event on the University of Georgia campus February 21-23, 2027. Lodging and most meal expenses are covered for all students and teachers selected to attend. Students selected for Georgia JSHS are expected to fully participate in all activities.



**UNIVERSITY OF
GEORGIA**
Center for Continuing
Education & Hotel

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ELIGIBILITY

The Georgia Junior Science & Humanities Symposium is open to high school students (grades 9-12) who have completed an original research investigation in the sciences, technology, engineering, or mathematics and who meet the requirements below. For situations not addressed here, the [JSHS Core Rules of Competition](#) prevail.

Scope

Students may compete in only one regional symposium. Students may only submit one project per competition year. If the student advances to the National JSHS, the same project from the regional event must be presented.

Team Projects

JSHS is an individual research competition. If a research project was done as a team, a **team leader** must be selected to submit the application. Only **ONE** application may be submitted per team. **If the project is selected, only the team leader will be invited to attend the Georgia JSHS event.** The research cannot be presented by any other member of the team. The judging criteria used to judge all JSHS presentations remain the same. The presentation should focus on the coordinated efforts of all team members and properly acknowledge the contributions of each team member. If an individual presenter from a group project is selected as a regional finalist and invited to present at the National JSHS, the same presenter must present at National JSHS. Scholarships and awards are awarded to the presenter.

Grade/School

Applicants must be in grades 9-12 and enrolled in a public, private, or home school geographically located in the state of Georgia. Fully online students who reside in Georgia are also eligible.

Citizenship Status

Students must be a citizen or Lawful Permanent Resident Green Card holders (LPR) as defined by the [U.S. Citizenship and Immigration Services Agency](#) to participate.

Appropriateness

While valuable endeavors, projects that are demonstrations, "library" research, literature reviews, or informational projects are not appropriate for JSHS.

Project Timeline

The research presented must have been conducted no earlier than January 2026.

Continuation Projects

Students may continue a research investigation previously submitted to JSHS. If a continuation project is submitted, the student must present significant new research, discuss how the project was expanded (e.g., methodology, new variables) and address any revisions in experimentation, analysis, methodology, and data. This information should be provided in the Statement of Outside Assistance form.

Application Requirements

Students must utilize the Georgia JSHS registration link to apply for and submit all required materials (Abstract, Research Paper, and [Statement of Outside Assistance](#) form) by the regional submission deadline. Students must comply with regional and national rules and policies regarding the preparation of written reports and presentations.

Outside Assistance

The written report should present the results of the student's original research investigation. Assistance from teachers, mentors, parents/guardians, or other students may be obtained. Students must clearly communicate their role in the completion of the investigation and demonstrate a thorough understanding of the research results.

First Author

For research projects conducted in a lab, submitted to a scientific journal, or under patent review, the applicant must have a primary, first author role in the work submitted.

Laboratory Setting

Any work done in a laboratory setting must be detailed on the Statement of Outside Assistance and signed by the supervising mentor.

Attendance/Participation

The date/time for the student's presentation is determined by regional symposium leadership. A student must be present for the assigned time or risk disqualification. **Students must participate fully in all JSHS activities.**



APPLICATION PROCESS

Students are selected to attend the Georgia Junior Science & Humanities Symposium after a preliminary evaluation of submitted Abstracts, Research Papers, and Statements of Outside Assistance.

Based on the results of this review, 45-50 Georgia students in grades 9-12 will be selected to participate in and present their research at the Georgia JSHS event February 21-23, 2027 at the University of Georgia.

Georgia JSHS culminates with the selection of five top presenters, who will win an expense-paid trip to compete in the National JSHS. The top three finalists will be awarded scholarships. The top two finalists will have the opportunity to compete in the oral presentation competition at National JSHS, and the other three finalists will be invited to attend National JSHS as Observers and may be invited to enter the National JSHS poster competition.

All applicants must adhere to the rules and guidelines on pages 5-11.

Selection Process:

1. Students submit application materials using the online application portal. The portal will open on December 1 at www.georgiacenter.uga.edu/gjshs.
2. As part of the online application, students enter their Abstract text and upload their Research Paper and Statement of Outside Assistance prepared in accordance with Georgia JSHS Rules & Guidelines.
3. Judges read and evaluate papers.
4. Based on these evaluations, 45-50 presenters are selected; selections are announced on January 27 (date is approximate).
5. At the Georgia JSHS event February 21-23, 2027, presenters deliver a maximum 12-minute slide presentation of their research to a panel of judges and peers. Presenters also participate in a peer poster session, hear from guest speakers, and tour UGA departments and laboratories.
6. Based on the presentations, presenters may be selected for awards and/or to advance to the National Junior Science & Humanities Symposium, which will take place April 20-25, 2027 in Chantilly, VA.

Important Dates

December 14 at 5:00 p.m. **Application Deadline**

The Abstract, Research Paper, and [Statement of Outside Assistance](#) must be submitted by 5:00 p.m. December 14 via the online application portal at www.georgiacenter.uga.edu/gjshs.

The application requires parental confirmation. Please allow ample time before the deadline for parent to complete confirmation and to resolve any technological/connectivity issues.

January 27, 2027 approx. **Selections Announcement**

All applicants will receive an email notification.

February 21-23, 2027 **Georgia JSHS**

University of Georgia Center for Continuing Education & Hotel in Athens, GA

Tentative agenda:

Sunday, February 21

4:30 pm Registration
 5:45 pm Dinner & Welcome
 7:30 pm Practice Sessions

Monday, February 22

7:00 am Breakfast
 8:45 am Presentations
 12:00 pm Lunch
 1:00 pm Presentations
 3:00 pm UGA Campus/Lab Tours
 7:30 pm Finalist Practice Sessions/
 Peer Poster Session

Tuesday, February 23

7:00 am Breakfast
 8:15 am Finalist Presentations
 12:55 pm Closing Banquet
 2:30 pm Awards Ceremony

April 20-25, 2027 **National JSHS**

Chantilly, VA



PROJECT CATEGORIES

Projects submitted to Georgia JSHS must be entered in ONE of the eight categories below. Some projects may fit in multiple categories (especially those in areas related to biomedical science / medicine and health), but only one category should be selected.

When selecting a category, consider what type of professionals would be most qualified to evaluate your project, and what areas of expertise are most important for a judge to have.

The category selected by the student during the application process is not guaranteed and may be changed after review of the Abstract and Research Paper.

Biomedical Sciences

includes Biomedical Medicine, Microbiology, Cellular and Molecular Biology, Genetics, Immunology, Pharmacology, Virology

Chemistry & Materials Science

includes Physical Chemistry, Materials, Alternative Fuels, Organic Chemistry (possibly in Life Sciences), Chemical Engineering, Earth Science, Geochemistry, Materials Science

Engineering & Technology

includes Aerospace, Aerodynamics, Electrical Engineering, Solar Energy, Vehicle Development, Devices, Mechanical Engineering, Robotics

Environmental Science

includes Environmental Engineering, Bioremediation, Ecosystems Management, Land Resource Management, Pollution, Toxicity in Ecosystems

Life & Behavioral Sciences

includes Developmental Biology, Plant Physiology, Population Genetics, General Biochemistry, Microbiology, Behavioral Science

Mathematics & Computer Science

includes Probability and Statistics, Mathematics, Computer Science, Algorithms, Databases, Networking, Computer Engineering

Medicine & Health

includes Biochemistry, Bioengineering, Disease Diagnosis and Treatment, Epidemiology, Immunology, Neuroscience, Physiology, Pathology

Physical Sciences

includes Astronomy, Theoretical Physics, Solid State Physics, Acoustics, Optics, Thermodynamics, Particle Physics, Quantum Physics, Nuclear Physics, Internet of Things (Network of physical objects embedded with electronics, software, sensors, and network connectivity)

The Georgia JSHS judging team includes individuals with significant graduate-level education and experience in the general fields of research represented by the project categories above. Expertise in each student's topic area is typically represented among the judges but is not guaranteed and may not be highly specialized. Some presentation sessions and judging teams have a mix of categories and expertise. Presenters have a responsibility to communicate their results so they may be understood by both non-specialized and expert judges alike.

**Application
Requirements**

Submit the application by 5:00 p.m. December 14, including:

- ✓ **Statement of Outside Assistance form**
- ✓ **Abstract**
- ✓ **Research Paper**

1. STATEMENT OF OUTSIDE ASSISTANCE (SOA) FORM

All applicants must prepare and submit the [Statement of Outside Assistance](#) (SOA) form as part of their application. **Students may only use the provided form dated 2026-2027; older versions will not be accepted.** The SOA form requires students to report on their contributions to the research investigation. Use of AI tools is permitted, but all use of AI tools must be clearly described in the SOA; refer to pages 9-10 for the full AI usage policy.

Please ensure the form is complete, contains all required signatures, and is uploaded correctly before submitting the application. Applications containing blank or incomplete forms may be disqualified.

Students must provide as much detail as possible in their SOA to fully explain the amount and type of outside assistance received. This information will be evaluated and referenced by judges to assist in their deliberations.

The **supervising teacher or mentor** must provide the following. If no teacher or mentor was involved in the research, a parent or guardian must provide these items.

- Comments on the students' individual contributions to the research investigation or engineering/computer science project
- Acknowledgment that the student conducted the research in accordance with proper procedures and protocols for animal or human research
- Signature on the last page of the SOA

2. ABSTRACT

All applicants must submit a **maximum 250-word** Abstract with their application. The Abstract should accurately convey the essential nature of the research conducted. The abstract must include the hypothesis and any conclusions reached as a result of the research. Abstracts also serve to attract the interest and curiosity of the non-specialist reader and encourage discussion.

The Abstract must be entered as plain text (i.e., free-typed or copied-pasted from a document) into the online application. If copying-pasting, check formatting (e.g., line breaks) before submission.

It is recommended that the Abstract include the following elements in narrative form (without subtitles):

1. Statement of the problem - what specific questions are addressed in the study, variables and limitations, intent and objectives of the research effort.
2. Purpose - usefulness of the study and describes why the project was undertaken.
3. Hypothesis - educated guess that shows relationship between a set of observed facts and a theory. (Engineering, math, computer science, and sometimes physics projects may not have a hypothesis.)
4. Procedure - brief summary of what was done.
5. Conclusions - concise statement of the outcomes of the investigation.



3. RESEARCH PAPER

The Research Paper details the original scientific research and should generally follow “best practices” in the field of study. Work must be that of the student, not the mentor. Use of AI tools is permitted, but all use of AI tools must be clearly described in the [Statement of Outside Assistance](#); refer to pages 9-10 for the full AI usage policy.

Research Paper Requirements

Please read carefully before preparing research paper. **Papers that do not follow these requirements may be disqualified.** Disqualified papers will not be sent to the judging panel for review.

1. The paper must use APA style formatting but **should not** include a running header. For help with APA, see the [APA Guide](#) and [Purdue OWL](#).
2. The paper must begin with a **title page** containing ONLY the following items: **project title, student name, school, and date**. The title page is included in the total page count.
3. The student’s name should NOT appear anywhere in the paper except for the title page.
4. The paper must be **minimum of 8 pages** and **maximum of 20 pages** (includes ALL paper components, i.e., title page, table of contents, works cited, appendices, etc.).

RESEARCH PAPERS EXCEEDING 20 PAGES WILL BE DISQUALIFIED.

Double-check your PDF before submission to ensure formatting has not pushed it beyond 20 pages.

5. The paper must be typed in **11-point Arial font**, be **double-spaced**, and use **1-inch margins**.
6. The paper must be submitted as a PDF (.pdf) document. Double-check formatting of images, tables, page numbering, etc. before submission to ensure distortion did not occur during PDF conversion.
If there is reasonable doubt about whether a paper violates formatting requirements (margins, spacing, font size, etc.), the paper may be required to be resubmitted as a Word (.docx) file for verification.
7. The PDF must be saved with the student’s name in the file name, following this pattern: **Lastname_Firstname_Paper**
8. The paper must not include hyperlinks or URLs (other than those used solely to cite references).
9. Photography, graphs, tables, diagrams, charts, or other graphic representation in the paper must be simply presented.
10. The following elements and format are recommended:
 - a. TITLE PAGE - Include the project title, student’s name, school, and date. **The student’s name must not appear anywhere else in the paper, other than the title page.**
 - b. ACKNOWLEDGMENT OF MAJOR ASSISTANCE - Include a statement on where and when the research was done and acknowledge those who assisted you with the study.
 - c. As applicable, statement that research involving non-human vertebrates or human subjects was conducted under the supervision of an experienced teacher or researcher and followed state and federal regulatory guidance applicable to the humane and ethical conduct of such research.
 - d. TABLE OF CONTENTS - List topics and sub-topics in order and the page numbers they start on.

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- e. INTRODUCTION - Provide background details or the setting of your specific research problem. Assume that the reader will be scientifically literate but may not be familiar with the details. State the purpose of the study early, and then state the hypotheses that you are testing. Describe what is already known about the research.
- f. MATERIALS AND METHODS - Describe the materials, methods, or procedures used to conduct the research. This section should be specific enough that the research could be replicated.
- g. RESULTS (DATA OR FINDINGS) - Present the results of your research findings in logical order. Use graphs, tables, and/or other representations. Tables and graphs should be numbered separately and should include captions. Explain the important features of each table, graph, etc. Report the results of statistical analyses of your data and the type of statistical tests used.
- h. DISCUSSION AND CONCLUSIONS - Interpret your results. Restate the hypotheses and explain how the data supported or rejected the hypotheses. Discuss your research findings in relationship to what is already known about the research problem (reported in the introduction). Draw conclusions based on your findings. The conclusions can include relevant, subjective observations or comments, but state that these are speculation. Acknowledge any limitations that affect the research results. For example, what further experiments need to be performed? Statistical techniques used to manipulate the data may have limitations. Some of the treatment effect might have been caused by a random, uncontrolled, intervening variable. Again, acknowledge these limitations and other factors over which the researcher had no control, and state how these might have influenced the study outcomes.
- i. REFERENCES OR LITERATURE CITED - List citations for every article cited in your text. Endnotes are needed for all direct quotations and for all important statements of fact or opinion that are taken from written sources. Figures, dates, descriptions of situations, scientific data, opinion, representations and the like which are presented to advance the subject of the paper must have a stated source. Check with your teacher or other advisors if you need further assistance in the format for endnotes. **References/citations are included in total page count but may be single-spaced. Total page count may not exceed 20 pages.**
- j. APPENDICES - If necessary, you may include larger tables of raw data in your report. Keep in mind that the introduction is far more valuable in the judging process than appendices of raw data. Label and paginate appendices. **Appendices are included in total page count but may be single-spaced. Total page count may not exceed 20 pages.**

Additional Tips for Abstracts and Research Papers

1. Use past tense and third person in describing completed research and present tense when stating existing facts and what is in the paper.
2. Incorrect spelling and sentence structure will discourage interest in your project.
3. Assume the reader knows general technical vocabulary, but avoid highly-specialized terms or abbreviations.
4. In the Abstract, if reference to procedure is essential, restrict it to identification of method or type of process employed. In the Research Paper, discuss the details of procedures and equipment.
5. State results, conclusions, or findings in a clear, concise fashion.
6. Have teachers and peers read your abstract and paper to make sure they communicate clearly.
7. Additional references:
 - a. Kathryn, Geese & Rezba, Students and Research (ISBN 0-8403-7766-5)
 - b. Matthews, Bowen & Matthews, Successful Scientific Writing (ISBN 0-521-55948-0)
 - c. Rezba, Sprague, Fiel, Funk, Learning and Assessing Science Process Skills (ISBN 0-8403-8430-0)



RESEARCH INVOLVING ANIMALS OR HUMAN SUBJECTS

Research involving vertebrate animals or human subjects must be conducted under the direct supervision of a qualified teacher or mentor with an approved active protocol (Scientific Review Committee SRC for vertebrates or Institutional Review Board IRB for human subjects, including the use of surveys). These must comply with local, state, or federal regulations for such research. JSHS requires students to acknowledge in their research paper and in the Statement of Outside Assistance that proper procedures and protocols were followed. Projects conducted without proper supervision will be disqualified from both Regional and National competition.

JSHS recognizes that students may conduct research in a high school setting, and both students and teachers may have questions on how to obtain proper approvals if the research is conducted in a school, home, or field research setting versus in a university laboratory.

General guidelines for experimentation involving invertebrate animals:

- Research protocols should be reviewed by institutional staff (science teacher, school principal, or mentor).
- Use the least invasive methods possible to achieve research objectives. Avoid unnecessary suffering or distress.
- Ensure research involving invertebrates is scientifically justified, with clear objectives and potential benefits outweighing ethical concerns.
- Optimize experimental conditions to reduce stress, including appropriate housing, nutrition, and handling.
- Regularly monitor animal conditions and maintain detailed records of care and experimental procedures.

General guidelines for experimentation involving vertebrate animals:

- Only animals that are lawfully acquired shall be used in experimentation and their retention and use shall be in every case in strict compliance with state and local laws and regulations.
- Animals used in experimentation must receive every consideration for their bodily comfort; they must be kindly treated, properly fed, and their surroundings kept in a sanitary condition.
- No intrusive techniques may be used, including surgery, injections, or taking of blood.
- When animals are used by students for their education or the advancement of science, such work shall be under the direct supervision of a committee of individuals knowledgeable of applicable regulations governing the care and animal of animals in the conduct of the project.
- At no time should a student do harm to a vertebrate animal in the conduct of the research.

General guidelines for research involving human subjects:

- No project may use drugs, food, or beverages in order to measure their effect on a person.
- Projects that involve exercise and its effect on pulse, respiration rate, blood pressure, and so on are approved if a valid normal physical examination is on file and provided the exercise is not carried to the extreme.
- If research involves administration of questionnaires or surveys, a proper consent from subjects must be obtained.
- No human cultures of any type – mouth, throat, skin, or otherwise – will be allowed [unless conducted at a regulated research institution with all proper approvals]. Tissue cultures purchased from reputable biological supply houses or research facilities are suitable.
- The only human blood that may be used is that which is either purchased or obtained from a blood bank, hospital, or laboratory. No blood may be drawn by any person or from any person specifically for a JSHS project. This rule does not preclude a student making use of data collected from blood tests not made exclusively for a JSHS project.
- Experimentation involving human subjects requires direct supervision of a committee of individuals knowledgeable of applicable regulations governing the conduct of such research. Non-regulated research institutions (i.e., high schools) should establish a committee of knowledgeable teachers and other mentors to view the research plan prior to the conduct of the research.

Information adapted from:

Bonkalski, J., Keehn, K., Petric, J., & Wheeler, P. (1994). *Guide book and policy manual for the Illinois Junior Academy of Science*. Illinois Junior Academy of Science.

Gilbertson, C. R., & Wyatt, J. D. (2016). Evaluation of euthanasia techniques for an invertebrate species, land snails (*Succinea putris*). *Journal of the American Association for Laboratory Animal Science*, 55(5), 577–581.



ACADEMIC INTEGRITY

All abstracts and research papers submitted to regional and national JSHS programs must be the original work of the student submitting the project. Students are expected to act with respect and integrity while conducting their research. Students must not present someone else's work as their own, fabricate data and figures, or otherwise plagiarize existing scientific work. All sources must be properly cited. In instances of collaboration during the research process, the Statement of Outside Assistance must list all contributors and their role in the project.

Research papers may include supporting materials that were created by another person if an accurate citation of the quoted material is included. Quotations from materials printed in newspapers, magazines or books are permissible if an accurate citation is included. If citations are not included, this is a form of plagiarism. Additionally, AI tools often quote content from sources (people, printed materials, etc.) without citation, the use of AI tools holds the user responsible to independently verify content is not plagiarized.

No submission may include any trademarked material(s) without the written permission from the owner(s) of the trademarked material(s). In addition, no research paper may include material that was created by another person without permission to quote such materials by the creator or owner of such intellectual property, such as unpublished documents or documents that explicitly state to obtain permission to use. If a student obtains permission to use someone else's material as part of their work, a copy of such permission must be made available to JSHS.

Plagiarism will result in the submission being disqualified from the regional or national JSHS event and/or revocation of awards or honors at any time following the event. Regional events may use plagiarism and AI detection software (where appropriate) as part of the evaluation of submitted student work.

Use of Artificial Intelligence

JSHS specifically forbids the use of generative artificial intelligence (AI) to entirely author the content of student research papers or abstracts. Any use of AI must follow the guidelines outlined in the NSTA Competitions Artificial Intelligence (AI) Use Policy (below). It is appropriate to utilize these AI tools to assist in text editing, rephrasing, or as a part of the research process (such as review, prompts for exploration or discovery, and clarification such as would normally be assisted by internet search engines). It is inappropriate to utilize AI tools for authorship (such as prompting authorship from scratch or minimal content) or utilization of AI tools for generation of a draft only modified by a student. The use of all AI tools, with exact specifications as to how the tool was utilized, must be disclosed in detail in the Statement of Outside Assistance.

The Georgia Junior Science & Humanities Symposium aligns with the National Science Teaching Association Competitions Artificial Intelligence (AI) Use Policy (below).

National Science Teaching Association Competitions Artificial Intelligence (AI) Use Policy

The purpose of the NSTA Competitions Artificial Intelligence (AI) Use Policy is to encourage responsible, ethical, and transparent use of Artificial Intelligence (AI) tools while preserving the educational value, originality, and integrity of student work.

AI technologies can be valuable tools for research, learning, problem-solving, coding, data analysis, and communication. However, students must remain the primary creators, researchers, and decision-makers throughout the project process.

AI may be used to assist with literature review and background research, but students must be able to identify, explain, and defend all scientific concepts, sources, methods, analyses, and conclusions without relying on AI during judging.

NSTA Competitions seek to evaluate students' creativity, critical thinking, scientific reasoning, engineering design, and communication skills – not the capabilities of AI tools.

Competition Philosophy: Artificial Intelligence is becoming an important tool in science, engineering, and technology. This competition encourages students to learn how to use AI responsibly while developing the critical thinking, creativity, and problem-solving skills that remain uniquely human.

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Guiding Principles

1. Students must remain the primary authors and researchers.
2. All AI use must be disclosed.
3. AI-generated information must be verified using reliable sources.
4. Students are responsible for all content submitted.
5. AI may assist learning and research but may not replace student thinking.

Permitted Uses of AI

Students may use AI tools to support their work when properly disclosed. Examples include:

► Research and Learning

- Exploring potential project topics
- Identifying keywords for literature searches
- Finding background information
- Explaining complex concepts
- Summarizing articles or technical papers
- Translating content into accessible language

► Brainstorming

- Generating ideas
- Exploring multiple approaches to a problem
- Identifying potential variables to investigate
- Considering alternative engineering solutions

► Coding and Technical Support

- Debugging code
- Explaining programming concepts
- Suggesting code improvements
- Assisting with software development

► Writing Support

- Grammar and spelling checks
- Improving readability
- Formatting citations
- Organizing outlines

► Data and Visualization Support

- Creating graphs from student-generated data
- Assisting with statistical calculations
- Suggesting methods for data visualization
- Explaining statistical techniques

Prohibited Uses of AI

Students may not use AI in ways that replace their own work or misrepresent authorship. Prohibited uses include:

► Research Design - using AI to:

- Generate the final research question
- Generate the final hypothesis
- Create the complete experimental design
- Develop the entire engineering solution

► Project Creation - using AI to:

- Write substantial portions of the research paper
- Write the project abstract
- Write conclusions
- Generate discussion sections
- Create presentation scripts that are presented as the student's own work

► Data Integrity - using AI to:

- Fabricate data
- Alter results
- Invent citations or references
- Generate fictional experiments
- Create false research findings

► Misrepresentation

- Submitting AI-generated work as original student work
- Failing to disclose AI use
- Presenting AI-generated analysis as personal analysis

Student Responsibilities

Students are responsible for:

► Verification

All information obtained through AI tools must be verified using credible sources, such as:

- Peer-reviewed publications
- Scientific journals
- Books
- Government publications
- University resources
- Primary research sources

AI-generated information alone is not considered an acceptable source of evidence.

► Original Analysis

Students must independently:

- Analyze data
- Interpret findings
- Draw conclusions
- Explain significance
- Defend project decisions during judging

Judges may ask students to explain how conclusions were reached and what role AI played in the project.

► Documentation

Students must maintain records of significant AI use during project development. Examples include:

- Research assistance
- Coding support
- Data analysis assistance
- Image generation
- Writing assistance

► Disclosure Requirements

Students must include an AI Use Statement in their project documentation if AI tools were used.

Example AI Use Statement: AI tools were used during this project to assist with literature searches, concept clarification, coding support, and grammar review. All information obtained through AI was independently verified through reliable sources. Experimental design, data collection, analysis, conclusions, and final project content were completed by the student(s).

Students should identify the tool used (e.g., ChatGPT, Claude, Gemini, Copilot, Perplexity), the purpose of use, and how outputs were verified.

AI-Generated Images, Graphics, and Media

Students may use AI-generated images, graphics, and media only if:

- Their use is disclosed
- They are clearly identified as AI-generated
- They do not misrepresent research findings

AI-generated images may not be presented as actual project results, observations, photographs, or experimental data.

Judging Considerations

Judges will evaluate:

- The student's understanding of the project
- Originality of thought
- Scientific or engineering reasoning
- Ability to explain methods and conclusions
- Appropriate and ethical use of AI

Failure to disclose AI use or misuse of AI may result in point deductions, project disqualification, and/or loss of awards or advancement opportunities.



PRESENTATION RULES & GUIDELINES

Students who are selected as Presenters for the Georgia Junior Science & Humanities Symposium will prepare a 12-minute oral presentation of their scientific research. For this presentation, students may use a computer-projected presentation developed with PowerPoint or other slide presentation software.

Georgia JSHS is modeled after the National JSHS. The purpose of the presentations is to afford students the opportunity and experience of reporting their research and experimentation to an assemblage of their peers, teachers, and other symposium attendees, and to allow judges to select those presentations that merit special recognition.

SESSION TIMING

The presentation may not exceed 12 minutes, followed by a 6-minute question period. The presenter will receive a 2-minute warning at the 10-minute point. At the 12-minute point, the presenter must stop the presentation, even if they have not finished. Following the presentation, the session moderator will ask for questions from the judging panel. If the speaker runs out of time and does not show all of their presentation slides, they cannot reference unseen slides during the question-and-answer period.

EQUIPMENT

Available audio-visual equipment in each session at Georgia JSHS includes: (1) projector; (2) projection screen; (3) laptop computer; (4) PowerPoint remote. Students may bring their own laptop computer for use during their presentation. Equipment operators will not be available in each session. Equipment problems are rare but possible; in the event of an issue, ask a chaperone to contact the Georgia JSHS director immediately. Students may enlist the help of a teacher or fellow student when experiencing difficulty with audio-visual equipment. Students should be prepared to re-show visuals during the questioning period.

COMPUTER USAGE

Presenters are instructed to:

1. Incorporate any video, illustrations or other graphical representations into a PowerPoint (or other slide presentation program).
2. Save the presentation file in a reliable location, such as a USB flash drive, the cloud, or both.
3. Prepare for any equipment problems by bringing back-up presentation materials.
4. Test computer equipment that may be brought to the symposium prior to the designated presentation time.

AUDIO AND VIDEO USAGE

Any use of audio or video must comply with the following:

1. Audio/video may be used only for aspects of the presentation that cannot adequately be presented on a slide.
2. Audio/video material must be integral to the research and should not be a substitute for presentation of data.
3. Video must not be used showing common procedures, equipment, or laboratory facilities.
4. Audio/video should illustrate work that was done and should not be used for stimulation or aesthetic value.
5. Audio/video should not make up more than one (1) minute of the presentation.
6. Audio/video must be embedded in the presentation.
7. Recorded or mechanically produced narration is not permitted. Narration must come from the presenter.

OTHER PRESENTATION RULES

Everything presented must be in the presentation slides alone. Presenters are not allowed to bring anything else to the presentation, including proof of design, materials, or written handouts. QR codes or links leading to information not included in the slides are not permitted.

Presentation Tips & Suggestions

Remember, you are the expert. No one in the audience knows as much about your research investigation as you. 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 representation help explain your results. Keep them simple and uncluttered. Focus on important information; e.g., name the variables on both axes of a graph, and state the significance of the position and shape of the graph line.

Practice will help perfect the presentation and the timing. Deliver your presentation at a comfortable pace. It helps to practice before a non-specialized audience. Do listen to the advice of your non-specialized audience but also get help from a teacher or other advisors as needed.



JUDGING CRITERIA

The following criteria are used by the judging team to guide discussions and evaluations of research papers and presentations. All papers and presentations must also follow the rules and guidelines on pages 5-11.

1. Research Problem

- Clearly demonstrates thorough understanding of existing knowledge about the research problem.
- Research problem is clearly stated and explained in detail.

2. Scientific Thought, Creativity/Originality

- Balanced presentation of relevant, legitimate information and data to support the research problem.
- Shows thoughtful, in-depth analysis of the topic.
- Fully demonstrates researcher's individual contributions to the project.

3. Research Design*

- Description of research design and procedures is detailed and shows reproducibility.
- Procedures are appropriate for the problem.
- Control and variables are clearly identified and explained.

*for Engineering, Technology, & Computer Science projects:

- Clear, detailed description and recognition of relationship between design and end product.
- Addresses economic feasibility of solution.
- Solution is tested for performance under conditions of use.

4. Methods

- Encompasses all materials required.
- Clearly states the hypothesis/research questions and explains the study design.
- If used, statistical procedures are included.
- A detailed narration of the steps taken to complete the experiment is included.

5. Results

- Results of the research are summarized.
- Data trends are clearly addressed and analyzed.
- Data that can stand alone in tables/figures are included in the paper or appendix.

6. Discussion/Conclusions

- Conclusion is logical and relevant to the research problem and results of experimentation or testing.
- Discussion addresses the significance of the results in detail and recognizes the limits of the research.
- Practical and/or theoretical implications of the research are recognized.

7. Communication

- Clearly communicates research results to non-specialized audience and judges.
- Terms are defined as needed. Avoids overuse of technical jargon.
- (Presentation): Responses to questions from judges and audience are thoughtful and appropriate.
- (Presentation): Presentation delivery is natural; presenter does not appear overly reliant on notes or to be reading from a script.

8. Sources/Acknowledgements

- Acknowledges major assistance received and credits anyone who helped with project and describes their help in detail. Note: Completion of the Statement of Outside Assistance form may not be sufficient. Sources of major assistance should be acknowledged in the research paper and presentation.
- References listed in the bibliography are significant, published, and relevant sources.

The Georgia JSHS office, University of Georgia, and judging team recognize the significant effort students undertake in conducting research. We aim to ensure an equitable competition by selecting qualified judges and communicating the rules of competition. In any competition of this nature, differences of opinion about the judges' interpretations may occur. It is the policy of the Georgia JSHS to support the interpretations and decisions of the judging team.



AWARDS

Significant awards are available to Junior Science & Humanities Symposium Regional and National student finalists. The U.S. Office of the Secretary of War and the U.S. Departments of the Army, Navy, and Air Force jointly sponsor undergraduate tuition scholarships and cash awards for student finalists who are citizens or Lawful Permanent Residents (LPR) of the United States, at the Regional and National Symposia. All scholarships are payable upon matriculation to college and upon meeting the JSHS scholarship conditions.

For students who participate in Regional and National symposia...

- **Public recognition and certificates**, honoring achievement and interest in research pursuits
- **Attain a sense of achievement and self-confidence** resulting from interaction with students from other schools and regions and with professional researchers and educators. To quote a former JSHS alumnus, “[At JSHS] I learned a tremendous amount of science, got to meet other high school students who shared my interests in science, and learned that I could succeed at any program that I chose to pursue.”

For teachers...

- **\$1,000 cash prize** to ten teachers across the U.S. honoring the individual teacher and their school’s contributions to advancing student participation in STEM research.

For Regional finalists...

- **An expense-paid trip to the National JSHS**, awarded to five finalists at each regional symposium. The National JSHS brings together over 360 participants in a program of educational and scientific exchange.
- **An invitation to present their original research investigation at the National JSHS** in the oral presentation competition for two regional finalists or in a poster competition for three regional finalists.
- **\$2,000 undergraduate, tuition scholarship**, awarded to the 1st place finalist at the regional JSHS.
- **\$1,500 undergraduate, tuition scholarship**, awarded to the 2nd place finalists at the regional JSHS.
- **\$1,000 undergraduate, tuition scholarship**, awarded to the 3rd place finalist at the regional JSHS.

For National finalists...

- **\$12,000 undergraduate, tuition scholarships**, awarded to each of the 1st place finalists at the National JSHS.
- **\$8,000 undergraduate, tuition scholarships**, awarded to each of the 2nd place finalists at the National JSHS.
- **\$4,000 undergraduate, tuition scholarships**, awarded to each of the 3rd place finalists at the National JSHS.

Scholarship Eligibility

Qualifying students must be a citizen or Lawful Permanent Resident (LPR) of the United States and be enrolled full-time in an accredited institution. All scholarship payments are made directly to the student’s college of enrollment.

For Team projects, scholarships and other awards available at Regional and National Symposia are awarded only to the presenter.

For JSHS scholarship award recipients whose awards are disbursed over multiple years, students must maintain a Cumulative GPA of 3.0 or above and declare a major in science, technology, engineering, mathematics or a related field. Total scholarship awards available through JSHS are capped at a maximum of \$30,000 per individual student winner. For more information about JSHS scholarships, see www.jshs.org/students/awards.