

**2018 INTERMOUNTAIN JUNIOR SCIENCE AND
HUMANITIES SYMPOSIUM (IJSHS)**

GENERAL INFORMATION AND GUIDELINES

**Nomination Deadline:
December 15, 2017**

**Student Research Paper Submission Deadline:
January 8, 2018**

**Student Selection
February 9, 2018**

**Symposium Dates:
March 5-6, 2018**

Hundreds of volunteers, including teachers, mentors, university faculty administration, representatives of the Army, Navy and Air Force, and others, contribute their time and talent to the JSHS program and the encouragement of science among the nation's best and brightest secondary school students. More information about the national and regional symposiums can be found at:

National Junior Science & Humanities Symposium (JSHS) Website
www.jshs.org

Intermountain Junior Science & Humanities (IJSHS) Website
<http://institute.mtech.edu/symposium/>

The IJSHS is sponsored by:

The U.S. Army, Navy and Air Force, and



MontanaTech

IJSHS Staff

Director: Amy Verlanic

Contact us:

1300 W. Park Street
Butte, MT 59701

office phone: (406) 496-4289 • cell phone: (406) 491-0766 • fax: 406-496-4696
email: averlanic@mtech.edu

IJSHS GENERAL INFORMATION AND GUIDELINES

Sponsorship

The Academy of Applied Science, a non-profit educational organization, administers the National Junior Science and Humanities Symposium (JSHS) in cooperation with other educational institutions throughout the United States, as well as Department of Defense Schools of Europe and the Pacific. JSHS annually reaches about 10,000 high school students and teachers at regional and national symposia. As a member of this national symposia, the Intermountain Junior Science and Humanities Symposium (IJSHS) has been sponsored by the United States Department of the Army since its inception, and was joined by the Departments of the Navy and Air Force after 1995.

Program Objectives

The primary aim of the IJSHS is to promote original research and experimentation in the Sciences, Engineering, and Mathematics at high school level, and to publicly recognize students for outstanding achievements. Each of the forty eight regional symposia, as well as the National Program, provide a forum for high school students to present the results of their original research in the Sciences, Engineering, Mathematics, Psychology and the Social Sciences. Students who participate in the symposium also have the opportunity to meet and exchange ideas, interact with practicing researchers, and explore future academic and career opportunities.

Intermountain Region and Symposium

The Intermountain Region consists of 5 states: Utah, Idaho, Montana, Western Colorado and Nevada. The symposium provides participating students and accompanying chaperones with lodging and meals. Travel expenses to and from Butte, and registration fees are the responsibility of the student/teacher participant, their school, school district, or other private agency. We will offer full or partial travel assistance to as many teachers as possible, but cannot guarantee funding.

Symposium Participants

Students: High School students from grades 9 through 12 are eligible to participate. Preference will be given to students who have been nominated by an instructor, submit a research paper, and have completed the registration process by the deadline. Women and minority students are strongly encouraged to apply. Permission to attend will be granted to eligible persons only by the IJSHS Director upon receipt of registration materials. Students who wish to participate as observers and not submit a research paper will be considered, but priority will be given to those students who submit papers.

Students must submit a written research paper prepared in accordance with the symposium's guidelines in one of the disciplines listed in the "Competition" section below. Eighteen (18) students will be invited to deliver a concise oral presentation during the symposium, and up to 42 students will be invited to showcase their work in a non-competitive poster session. Written and oral reports should present the results of the student's own work including ideas and data obtained by the student.

Students are encouraged to obtain assistance from teachers, mentors, parents, or other students. If outside assistance is rendered, it should be properly acknowledged and clearly stated. Winning students may be asked to provide notebooks and/or other documentation detailing their research.

Sponsoring Instructors/Chaperones: Each student participant must be accompanied by their sponsoring instructor or a designated chaperone (i.e. another instructor or a parent). Multiple students from the same high school may have the same sponsoring instructor or designated chaperone.

Paying Participants: Based on the availability of space, students who are not submitting a research project, teachers that are not supporting a student research project from their school, or a parent(s) may be able to attend as a paying participant. Permission of the IJSHS Director will be required upon receipt of registration from the sponsoring high school. These spaces will only be given if there is room available once the registrations from the students submitting research papers and their sponsoring instructors/chaperones have been received.

Research Competition

Students submitting papers must state their research discipline. The designation will be used to place the student in the correct judging category for the competition. If no discipline is designated, the judges will determine which discipline the paper will be placed in the competition. The eight major disciplines are:

- Environmental Science: Environmental Science/Engineering (Bioremediation, Ecosystems management, Environmental engineering, Land Resource Management, Pollution, Toxicity; impact upon ecosystems)
- Biomedical Sciences; Molecular/Cellular: (Biomedical medicine, Microbiology, Molecular/cellular, Genetics, Immunology, Pharmacology, Virology)
- Chemistry: including Physical Chemistry, Materials Science, Alternative Fuels, Geochemistry (Physical Chemistry, Materials, Alternative Fuels, Organic Chemistry (possibly in life science), Chemical Engineering, Earth Science-Geochemistry, Energy-Alternative Fuels, Materials)
- Engineering and Technology: (Aerospace, Aerodynamics, Electrical Engineering, Energy-Solar, Vehicle Development, Devices, Mechanical Engineering, Robotics)
- Life Sciences: (Developmental Biology, Plant Physiology, Population Genetics, General Biochemistry, Microbiology)
- Math and Computer Science, Computer Engineering: (Probability and Statistics, Math, Computer Science-Algorithms, Databases, Networking, Computer Engineering)

- Medicine and Health/Behavioral sciences; (Behavioral sciences, Biochemistry, Bioengineering, Disease Diagnosis and Treatment, Epidemiology, Immunology, Neuroscience, Physiology, Pathology)
- Physical Sciences including Physics, Astronomy, Internet of Things: (Astronomy, Physics-Theoretical, Physics-Solid State, Acoustics, Optics, Thermodynamics, Particle Physics, Quantum Physics, Nuclear); Internet of Things—network of physical objects or “things” embedded with electronics, software, sensors, and network connectivity

Paper Readers and Presentation Judging Panel

The IJSHS Paper Readers and Presentation Judging Panel includes individuals who hold a Ph.D. or equivalent experience in the general fields of research that are represented by the student presenters. Judges are also selected for their interest in encouraging students’ interest and future development in the Sciences, Engineering, Mathematics, and Social Sciences.

Research Paper Review and Symposium Presenter Selection

All research papers are read by at least two research specialists to determine which students will be invited to give competitive oral presentations, and which will be invited to showcase their work in the non-competitive poster session. In the event that the two research specialists reviewing a research paper do not agree, then the Head Judges will review the paper and make the final determination.

Symposium Presenter Assignments

In an attempt to balance the number of presenters in each session, sessions may encompass more than one of the above disciplines. When oral, non-competitive poster presenters, and observers have been determined, we will notify the nominating instructors by email of the presenter status for each of their students February 10, 2017. Paper scores and reviewer comments for each paper will be then be returned to the nominating instructors to be returned to students.

If a student presenter does not agree with their presentation session assignment, he or she may contact the IJSHS Director to request reconsideration. The student’s appeal must be made no later than 5 pm on February 16, 2018.

Preparing Your Research Paper

Please consider the following suggestions to keep in mind as you write your research paper.

Your written report is a critical aspect of your success in the symposium. Without a good report, even a great project may not be offered a chance to participate competitively. So, you should take some time to make sure it is as good as it can be.

An important aspect of the report is formatting. Any format that meets the rule requirements is acceptable, but most of our readers are professional scientists who are accustomed to reading research in a standard format. Many students are not aware that professional research reports are often formatted very differently from the lab reports that you have written in school.

Before you start to prepare your report, we advise you to look at some scientific papers to get a feel for how reports are formatted. You can find a free online database of biological and medical literature at <http://www.ncbi.nlm.nih.gov/pubmed/>, and at <http://arxiv.org/> is a preprint server for physics, math and computer science. Many of the articles in these archives are free for download to the public.

Other suggestions to improve your writing:

- Use spell check and ask others to proofread for grammatical and content errors
- A professional research report is not a recipe of what you did and a list of raw data; instead, it is a narrative that guides the reader through the process of discovery.
- Another common mistake is to think of the narrative as an epic tale centered on yourself and your trial and tribulations in the project. While you will describe what you did, the narrative is based around your project and your results—it is an intellectual journey, not a personal one.
- Use primary literature references when you can (see above for public databases, Google Scholar is also an excellent resource). Web pages are not good sources.
- Use graphs to present numerical data—line graph or bar graphs are usually the most relevant. Include error bars, if possible.
- Conduct proper statistical tests to determine whether your data support your hypothesis with statistical significance.
- Use first person and active voice whenever possible, except in the methods section where passive voice is acceptable.

IJSHS Research Reports Structure and Content Requirements

This section is intended to help students with preparing their research papers. These guidelines also constitute the template used in the evaluation of the reports. It is the student's responsibility to ensure his/her report follows these guidelines. Failure to follow these guidelines may result in disqualification.

Paper Formatting Guidelines

- Left, right, upper and lower margins should be set to 1 inch
- Text should be in Times or Times New Roman, 12pt font with double line spacing
- Section headings should be in bold
- Paper should be a minimum 5 pages, maximum 20 pages including title page, abstract, tables and figures, acknowledgements, and references
- Graphs, tables, diagrams, and figures should be simple to allow the judges online access to the research paper
- The maximum size limit for the research paper is 1.8 Mb
- A recommended outline for the research paper includes:

- Abstract and title page stating student's name, school address, title, and category of the research;
- acknowledgement of major assistance received;
- table of contents;
- if applicable, a 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 human and ethical conduct of such research";
- introduction;
- materials and methods;
- results (data or findings);
- discussion and conclusions;
- references, or literature cited;
- and appendices if necessary.

Content Guidelines

The report should contain the different sections listed below and in the order in which they should appear. This uniform structure is standard for most scientific research publications. We feel that this will help the readers follow your report more easily and will make their evaluation less subjective. The posters and presentations will contain the same sections. Although this structure may not correspond to your personal approach to the problem you decided to study, we believe that any research project can be presented within this structure. Any format that meets the rule requirements is acceptable, but most of our readers are professional scientists who are accustomed to reading research in a standard format. Many students are not aware that professional research reports are often formatted very differently from the lab reports that you have written in school. More basic information on the parts of a scientific article can be found at <http://en.wikipedia.org/wiki/IMRAD>. Further suggestions can be found at <http://www.ruf.rice.edu/~bioslabs/tools/report/reportform.html>.

1. Title Page & Abstract (limit: 200 words):

The format for the 200-word abstract includes: 1 inch margins in 12 point Times or Times New Roman font, single spaced. The header preceding the abstract body must include:

1. Title of the research;
2. Authors name(s);
3. High school, high school city, high school state;
4. Name of teacher/mentor/sponsor and his or organization. Precede the individual's name with a subheading (i.e. teacher, mentor, sponsor);
5. Include one line of space between the heading and the abstract body.

The abstract is a short summary of your project report. One way to write a good abstract is to have it include one sentence for each key idea with at least one key

idea from each section of the report. It is best to write the abstract after you have written all other sections.

2. Acknowledgements

In this section, acknowledge the help, support and guidance you received while working on the project.

3. Introduction

a. **Background** - This section provides background information for your research project. It may be historical in nature or it may provide a broad overview of a field of research. Report readers may not be experts in your field of investigation. This section should cultivate their interest and educate them so they have the required elements to understand your specific project in a broader context.

b. **Problem and Hypothesis** - In this section, bring the reader's attention to the specific, well defined, and isolated problem you have decided to investigate. This is the heart of your research project. It can often be formulated as a question. For example, "Why do some tree leaves turn yellow in the fall while others turn red?" Depending on the nature of your question, you may develop a hypothesis that will be tested later in the paper. This section should make use of the more general concepts presented in the introduction and anticipate the difficulties your methods of investigation have to circumvent.

4. Methods

In this section, present your experimental design or system, explain any tests you did, and note which statistical tests used. It typically begins with a discussion of the relationship between different parameters of the system being investigated, independent from your particular experiments. Then describe your experimental system. You may describe specific aspects of what you did in text, but drawings and pictures are often useful. This section should describe how various aspects of the experimental design are motivated by different parameters of the problem being investigated. This section should also describe the kind of data you can obtain from your set up and include a discussion of the precision and possible sources of error.

5. Results

Data: Tables and figures can be in-text in the results section, or at the end of your report. In the results section, provide the results you obtained under the various conditions you investigated. It can include comments about limitations or difficulties you encountered. Numerical data should be presented in tables and/or graphs that are easy to understand, and that clearly show the relationships between the data. Photographs or drawings that represent the results of an experiment (not an experimental set up as this goes in the Methods section) should be included in this section. If the raw data has to be used in some calculation, that should be done in this section. Figures and tables with their

caption should leave no doubt as the nature of the quantities represented and of the units used. If it ever happens that you have to provide a numerical result not accompanied by an error, a clear justification should be provided. Be sure to only present results in this section- no interpretation (save that for the discussion section).

6. Discussion & Conclusion

Interpretation - In this section, comment on the results presented in the results section. It can include comments about limitations or difficulties you encountered. Then, explain why you obtained the results you did and compare your research results to what other research results in the scientific literature. In addition, provide a broad discussion regarding the implications of your observations. You should explain if your results supported or refuted your hypothesis, and make clear references to tables and/or graphs in the previous section. An important thing to realize is that scientists never prove a hypothesis correct. Rather, we try to prove a hypothesis wrong in our experiments, then discuss if the results supported the hypothesis. It is not a problem if your results weren't what you expected. In fact, this is an important part of science, and it is sometimes said a conclusion closes a door and opens a window. You can describe something else you could have done, something you could have done differently, as well as how you or others could extend the work. You can then risk some conjectures as to how the results and conclusions might be different. This last part of your conclusion may be a hint at the different ways along which you are going to continue investigating this brilliant topic you just uncovered in your research project.

7. References:

In this section, list the sources you used: articles, books, web-pages, personal communication, etc. Avoid using web-page references, with the exception of open source software. Each listed reference in this section should be cited at least once in the text of your report. You can format your references using the citation format of any journal in the field you are working in. APA format is a good format to use, and a great guide can be found at <https://owl.english.purdue.edu/owl/resource/560/05/>.

Journal reference formats can be found on the journal website under "Instructions for Authors". Citation management software (ex. Endnote, LaTeX or Zotero) can automatically format your references into many acceptable styles.

Additional Suggestions for Preparing Your Research Report

We suggest that you respect the section numberings, order and titles, adding your own description for each one. For example, if your project concerns physics and chaotic systems, your first section could be: "1.) Introduction: From deterministic Newtonian mechanics to dynamical chaos". You may consider subdividing any of these sections into subsections covering specific elements. For example your section "3) Methods" could be subdivided into subsections "a) Construction of the

measuring device”, “b) Recording of raw data” and “c) Error propagation and analysis of the raw data”.

It is very important that figures and tables are all numbered, referenced in the text and accompanied by a detailed caption. Each table and figure should be numbered and labeled (Table 1, Table 2, etc.; Figure 1, Figure 2, etc.) directly beneath the figure or table. Each table or figure should describe any symbols used in a legend. Large data sets should be included as an appendix to the report and referenced in the data section.

Oral and Competitive Poster Judging

Session timing

The research presentation may not exceed 12 minutes, followed by a maximum 6-minute question period. A session moderator will aid the student speaker in maintaining this schedule and in fielding questions from the audience. The procedure for maintaining the time includes a 10-minute signal for the student, and finally a 12-minute signal. At the 12-minute point, the student speaker must stop the presentation even if he or she has not finished. Following the presentation, the session moderator will ask for audience questions. The speaker may entertain questions while the exchange appears interesting and relevant. Questions intended to harass the student speakers will not be allowed by the session moderator. The speaker should repeat a question before answering so the audience may understand the entire dialogue.

Use of Audio Visuals - Available equipment

Available audio-visual equipment in each session includes: (1) projector; (2) projection screen; and (3) a laser pointer. PC based computers will be in each session room configured with Microsoft 2016 PowerPoint and Adobe Acrobat. Students should number visuals in sequence so the presenter can easily reshow one. Many times, visuals are re-shown during the questioning period.

Aids to the presentation

No written handouts or models are permitted. Software such as PowerPoint and computer action video may be used to prepare or drive slides or overheads.

VCR and Computer Usage

1. If using LCD projectors and computers, students must...

- Review Guidelines for Preparing PowerPoint Presentations (<http://www.jsbs.org>, Guidelines section).
- Embed any video, or other presentation developed through other software, into PowerPoint 2016.
- Save the PowerPoint presentation to an IBM-compatible CD or Zip drive, and use that saved file on available PC-based computer and LCD systems.
- Prepare for any equipment problems by bringing back-up overheads.
- Start computer equipment that may be brought to the symposium prior to the designated presentation time. No additional presentation time will be allowed to cue up a presentation.

2. If using video, students must comply with the following ground rules...
- The video component cannot make up more than one (1) minute of the presentation.
 - No audio or background music is permitted other than sounds that are an integral part of the research. Recorded or mechanically produced narration is not permitted. Narration must come from the speaker.
 - Videos (and audio, if any) may be used only for those aspects of the presentation that cannot adequately be presented by slides or overheads. Video material presented must be an integral part of the research and should not be a substitute for presentation of data. Videos must not be used for presentation of common procedures, illustrating equipment or showing laboratory facilities. Videos should illustrate work that was done and should not be used for stimulation or aesthetic value.

Suggestions from The National Symposium to prepare for oral presentations

Remember, you are the expert. No one in the audience 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 representation 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. Do listen to the advice of your non-specialized audience but also get help from a teacher or other advisors as needed.

Oral and Competitive Poster Judging Criteria

Regional and national judges evaluate the oral presentations using the below criteria. Judges will use a total score of 30 points for each of the 6 criteria with each criteria weighted on a scale from 1 to 5. The scores are tallied for each presenter and used as the basis for discussion among judging team members where each criterion is considered.

1. Statement and identification of research problem
 - Clarity in stating problem under study
 - Demonstrated understanding of research problem
 - Understanding of background information relevant to research problem
2. Scientific or engineering thought – Process skills, creativity and understanding of the relationship of the project to existing work

3. Research or engineering design and procedures
 - a. For science related research
 - Student's involvement in designing the investigation
 - Appropriateness of research design and procedures
 - Identification and control of variables
 - Reproducibility
 - Level of effort
 - b. For engineering, computer science, or technology related research
 - Workable solution that is acceptable to a potential user
 - Recognition of economic feasibility of solution
 - Recognition of relationship between design and end product
 - Tested for performance under conditions of use
 - Results offer a significant improvement over previous alternatives
 - Level of effort
4. Discussion and conclusions – relationship of results to data, implications, next steps Clarity in stating conclusion; conclusions are supported by 1) data (science), or 2) results of testing of design (engineering)
 - Recognizes limitations and significance of results
 - Evidence of student's understanding of the scientific or technological principles
 - Theoretical or practical implications recognized or understood
 - What was learned? New questions introduced? Future research needed?
5. Skill in communicating the research results.
 - Definition of terms as necessary
 - Appropriate use of audio-visuals
 - Response to questions from audience and judges
6. Acknowledgement of sources and major assistance received Below are the general criteria used to judge the research presentations:
 - Did student use resources besides the internet?

Awards

Significant awards are available to IJSHS student finalists. The Department of the Army, Navy and Air Force jointly sponsor the following awards (subject to the availability and release of government funding):

All students who participate in the symposium receive certificates honoring their achievement and interest in research pursuits.

Teachers who participate in the symposium are considered for a \$500 award honoring an individual teacher and his or her school's contribution to advancing student's participation in research.

The top five regional finalists will be announced at the awards banquet and receive an expense-paid trip to the National JSHS April/May, 2018. An invitation to present original

research at the National JSHS oral competitions is awarded to the regional 1st and 2nd place oral finalists. The 3rd place finalist will receive an invitation to present during the National JSHS poster competition. A total of \$4,500 in undergraduate, tuition scholarships, awarded at \$2,000, \$1,500, and \$1,000 to each of top three regional symposium finalists (scholarship payable upon matriculation and upon meeting the JSHS scholarship conditions).

Awards at the National level include tuition scholarship award levels of \$12,000, \$8,000, and \$4,000, respectively, for each 1st place, 2nd place, and 3rd place National winner in each category.

Students must be a citizen or permanent resident of the United States to be eligible for the government-sponsored scholarship awards. Additionally, scholarships are awarded to only one student. Student presenters who are part of a team must notify the JSHS of which student finalist will receive scholarship funding should the team presenter earn regional or national awards.

Complaints

The IJSHS office and the Judging Committee recognize the enormous effort that students undertake in conducting their research. Therefore, our objective is to ensure an equitable competition by selecting qualified judges and by communicating the rules of the competition to both students and judges. We realize that in any competition of this nature, differences of opinion about the judges interpretations may occur. It is the policy of the IJSHS, as well as the Academy of Applied Science, and the sponsors of the JSHS Program (e.g. the Army, Navy, and Air Force) to support the interpretations and final decisions of the judges. Recommendations regarding the future conduct of the IJSHS judging process, or requests to clarify the rules of competition can be directed to the attention of the IJSHS Regional Director, Amy Verlanic, Montana Tech, 1300 W Park Street, Butte, MT, 59701.

Intermountain Region Specifics

Important Dates

November 17, 2017 – Nominations open

December 15, 2017 – Deadline for teachers to nominate students

December 16-January 7 – Students submit papers and begin registration process

January 8, 2018 – Student papers are due

February 9 – IJSHS selection announcement

February 16 – ALL registrations must be complete, fee paid, and parental consent forms received

March 5-6, 2018 – Intermountain Junior Science & Humanities Symposium

Registration and Costs

Registration cost is \$40 per participant (students and teachers). This fee covers food, lodging, and all IJSHS activities. Guests who are not teachers or official chaperones

must pay a registration fee of \$250. Due to space limitations, guests must obtain permission from the IJSHS Director.

Checks and parental consent forms are due by February 16, 2018. Please make checks payable to 'Montana Tech' and mail to:

Tammy Gordon
Montana Tech--IJSHS
1300 W. Park
Butte, MT, 59701

Registration forms can be found on the IJSHS Web site: <http://institute.mtech.edu/jshs-registration/>

Accommodations & Meals

The IJSHS will cover lodging costs and make hotel reservations.

Student Accommodations:

Teachers/chaperones: on the Teacher/Chaperone Registration page, list students who will room together. Up to four (4) students of the same gender will be assigned to each room. Depending on the number and gender of students per school, requests may not be honored.

Teachers/Chaperone Accommodations: Two teachers of the same gender will be assigned to share a room. We will do our best to accommodate roommate requests. Each room will have two queen size beds. Please contact the Director with special requests. Teachers desiring a private room should indicate on the registration form, and depending on availability of rooms, we will attempt to accommodate these requests. Please note there is an additional charge of \$100 for a private room.

Meals will be provided by IJSHS beginning with dinner on Monday, March 5th and ending with an awards dinner, Tuesday, March 6th. Meals on the way to and from the IJSHS will be at the expense of the delegate.

Other Paying Participants: If a spouse or other guest will be attending who is not an official participant or chaperone and plans to attend any or all of the IJSHS functions they will be invited to participate as a paying guest for \$250 and this must be arranged and paid for before February 16, 2018. They must also fill out a registration form for our records. These are on a space available basis only.

Parents and Guests are welcome to attend the awards banquet on Tuesday, March 6; however, they must inform the IJSHS office at least one week in advance and will need to pay \$30 each for the meal in advance. No exceptions.

Travel

Teachers may apply for funding to support travel to the IJSHS. To apply, submit completed **Teacher Travel Assistance Application** on our Registration webpage by **February 16, 2018**.

Please note; student participants may not drive individual automobiles during the IJSHS due to insurance liability. Parking is available for teachers/chaperones who plan to drive. While at the symposium, participants are responsible for transportation between the hotel and Montana Tech, and offsite events.

Dress

In March, the weather in Montana is unpredictable. It can range from 30 degrees to blizzard conditions. Attendees should plan for inclement weather. Comfortable shoes, casual clothes, and a coat are recommended for most of the daytime activities. Everyone is encouraged to wear appropriate professional attire for the presentations. The awards banquet will be semi-formal, meaning no jeans or t-shirts.

Mandatory Attendance

All symposium participants (students, parents and teachers) are required to remain for the entire symposium, and to attend all meetings, and activities, unless prior arrangements have been made with the IJSHS Director.

For participants with a long distance to travel, we will allow for early departures, but attendees must notify the IJSHS office one week prior to symposium if they will be departing before the final Awards Banquet on Wednesday night. This is necessary to get an accurate meal count.

Teachers/Chaperones who accompany their students are expected to oversee student participation in ALL symposium activities. Presentations, scheduled group activities (including lectures, tours of research and educational facilities) will occupy the majority of the time. Your registration is your agreement to attend all scheduled activities while you are at the IJSHS. A detailed schedule will be sent in mid-February before the symposium begins. Delegates wishing to sightsee on their own in Montana should plan to arrive before or stay after the symposium to do so.

Notice of Non-Discrimination

The Intermountain Junior Science and Humanities Symposium in conjunction with Montana Tech does not discriminate on the basis of race, color, religion, national origin, sex, age, status as a disabled individual, sexual orientation, gender identity/expression, genetic information or protected veteran's status, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services.

Additionally, Montana Tech endeavors to provide reasonable accommodations and to ensure equal access to qualified persons with disabilities.