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Welcome

Thank you for volunteering to serve as an Event Supervisor at an Ohio Science Olympiad Tournament. This manual is designed to better assist you in creating an event that aligns with the spirit and rules of Science Olympiad. We (Ohio Science Olympiad) pride ourselves on offering the highest quality competition while meeting or exceeding the standards set forth by the Science Olympiad National Office. As such, it is important that Event Supervisors prepare and design their events in accordance with event rules and provide both a challenging and engaging event for participants.

About Science Olympiad

BACKGROUND

Science Olympiad is a “pay to play” academic sport that allows students at the K-6 level to participate in a competitive tournament or a hands-on Fun Day or Fun Night event. In grades 6-12 Science Olympiad functions more like a track team, requiring preparation, commitment, coaching and practice throughout the year. Each academic year, school based teams are allowed to register a team of 15 students who will cross train in multiple events within their preferred discipline.

There are three specific divisions;

- Division A for students K-6 (Elementary) - *Division A does not compete at the state or national level*
- Division B for students in grades 6-9
- Division C for students in grades 9-12

Teams in Division B and Division C compete in 23 Science, Technology, Engineering, and Mathematics (STEM) focused events. Every year, Science Olympiad events are rotated to incorporate five different areas of science education:

- Life, Personal, and Social Science
- Earth and Space Science
- Physical Science and Chemistry
- Technology and Engineering
- Inquiry and Nature of Science

Each school-based team identifies a set of students to compete in n event(s) per the Science Olympiad National Rules.

GENERAL RULES, CODE OF ETHICS, AND SPIRIT OF THE PROBLEM

Revised by the Science Olympiad Rules Committee Chairs and Executive Board, July 2014

The goal of competition is to give one’s best effort while displaying honest, integrity, and good sportsmanship. Everyone is expected to display courtesy and respect. Teams are expected to make an honest effort to follow the rules and act in the spirit of the problem (to not interpret the rules so they have an unfair advantage). Failure by a participant, coach, or guest to abide by the following codes and accepted safety procedures, may result in an assessment of penalty points or, in rare cases, disqualification by the tournament director from the event, the tournament, or future tournaments.

1. Actions and items (e.g., tools, notes, resources, supplies, electronics, etc.) are permitted, unless they are explicitly excluded in the rules, are unsafe, or violate the spirit of the problem.

2. While competing in an event, students may not leave without the event supervisor’s approval and must not receive any external assistance. All electronic devices capable of external communication (including cell phones) must be turned off, unless expressly permitted in the event rules and left in a designated spot if requested.

3. Students, coaches, and other adults are responsible for ensuring that any applicable school or Science Olympiad policy, law, or regulation is not broken. All Science Olympiad content (e.g., policies, requirements, clarifications, FAQs, etc. on soinc.org) must be treated as if it were included in the rules.
4. All pre-built devices presented for judging must be constructed, impounded, and operated by one or more of the 15 current team members unless stated otherwise in the rules. If a device has been removed from the event area (even after the conclusion of the event), appeals related to that device will not be considered.

5. Officials are encouraged to apply the least restrictive penalty for rules infractions (see examples in the Scoring Guidelines). Event supervisors must provide prompt notification of any penalty, disqualification, or tier ranking.

6. State and regional tournament directors must notify teams of any site-dependent rule or other rule modification with as much notice as possible, ideally at least 30 days prior to the tournament.

PURPOSE OF OHIO SCIENCE OLYMPIAD

The Ohio Science Olympiad is a statewide program dedicated to improving the interest of all students in the ever-changing world of Science, Technology, Engineering, and Mathematics (STEM). In an effort to motivate students to excel in and out of the classroom, a strong emphasis is placed on active, hands-on participation to assist students in their overall social development, leadership, and problem solving skills.

Ohio Science Olympiad goals are achieved by active participation in rigorous academic interscholastic competitions, tournaments, and non-competitive events that consist of a series of individual and team events that students prepare for throughout the year. The Ohio State University has managed the statewide Ohio Science Olympiad Program and hosted the State Tournament since 1984. The Ohio Science Olympiad program has become one of the most successful in the nation, annually ranking as one of the top ten largest programs in the United States. Ohio teams consistently place in the top 20 at the National Tournament out of 120 teams.

Glossary

Alternate - Teams may bring alternate team members to a competition in case an official team member is unable to compete. Unless replacing an official team member, alternate team members can not compete in any of the 23 official events. They may, however, compete in trial events and fun events.

Arbitration - Arbitration is the process through which teams can call attention to questions they have regarding an event supervisor’s adherence to the national rules. If it is believed that the rules are not being followed, creating an unfair advantage for another team, the head coach should discuss this with the event supervisor. If the matter is not resolved, the head coach may submit an appeal form to the arbitration team as soon as possible.

Director - The tournament or competition director is the person in charge of planning and overseeing the competition. All questions you have regarding Science Olympiad and your upcoming competition should be directed to your tournament/state director.

Event Supervisor - Event supervisors are dedicated volunteers and coaches who prepare, facilitate, and score each of the tournament events.

Headquarters - Headquarters is the scoring area of each tournament. Event supervisors report to headquarters as soon as they are finished scoring their event.

Impound - Impound is when team-built devices are checked-in before the competition begins. OHIO will allow any student member of the team or alternate to impound a device on the day of the State Tournament*. (*Students/coaches should check the rules as impound may vary at different tournament levels)

Invitational - An Invitational is a voluntary practice competition, with no Regional, State, or National impact. It provides coaches and students the opportunity to experience a Science Olympiad competition or explore events they normally wouldn’t participate in during a Regional, State or National competition.

Regional - Regional competitions are tournaments that determine which teams qualify for the State Tournament.

Membership Registration - Science Olympiad has required that all school-based teams (up to 15 members) competing in any Science Olympiad tournament (Invitational, Regional, State or National) must be a member of Science Olympiad Statewide program and paid registration and tournament fees as applicable. Ohio School-based Team registration begins the 3rd week of August. This process officially enters your school into Ohio Science Olympiad for the year and allows your school-based team the ability to compete in the Science Olympiad program around the country.
Invitational Registration - Invitational registration takes place in the Fall. A team must be registered with Ohio Science Olympiad to participate in an Invitational.

Self-Schedule - Self-schedule is the process through which a coach chooses time slots during which their team will compete in certain events. Self-schedule is done online in the weeks leading up to the competition.

Self-Schedule Events - Self-schedule events are events that need to be scheduled by coaches. They are typically technology/building events.

State Tournament - The Ohio Science Olympiad State Tournament is held at The Ohio State University. Teams that qualify at their Regional competitions advance to the State Tournament. The top team finishing in each Division (Division B and Division C) will qualify for the National tournament. If Ohio falls within the top ten largest state registrations in a Division we may be allowed to send a second team in that division.

Role of Event Supervisor

As an Event Supervisor, you are responsible for all aspects of your event including expenses and materials not provided by the state office (please contact the state office with questions regarding what items or materials may be available). Event Supervisors are responsible for providing all materials needed for their event including tests, answer sheets, scoresheets, and any additional paperwork (such as charts or graphs). Please contact the tournament director for additional information or questions.

- Read rules carefully and understand them completely. It is also important to be familiar with the Rules Clarifications and FAQ's on the National website.
- Try to anticipate for every technicality that could be exploited, bent, interpreted, challenged, etc. The more familiar you are with the rules the easier it will be to make judgments on event day.
- You must also provide copies of the test and/or answer sheets for 40 teams, if you are serving as the Event Supervisor for the Ohio State Tournament

EVENT SUPERVISOR PLEDGE

On behalf of my fellow supervisors and tournament personnel, I pledge to run my event with fairness and respect for the participants and their coaches. Our actions will reflect the principles of the Science Olympiad program and display the pride we feel as representatives of our colleges, universities, companies, states, or organizations.

Events

Science Olympiad events will be one of the following formats:

- Construction / Performance
- Stationary / Lab Practical
- Rotational

CONSTRUCTION / PERFORMANCE EVENTS

This format requires students to construct a device prior to the tournament, or build a device during the competition.

It is important for you to be very familiar with the specifics for the device. Think about exceptions and challenges to these rules, and contact us prior to the contest if you have questions. Make special note of the events that require impounding (see full description in next section). Be familiar with the current rules for your event, as they change annually. Keep in mind the event may vary greatly between Division B (middle school) and Division C (high school).

Things to remember for construction events:

- Sometimes devices fall apart or get slightly damaged during transportation to and from impound. If a team arrives with a device
that does not meet all specifications, you are allowed to let them make minor corrections, if this does not give them an unfair advantage. Usually, this is as simple as something sticking out of the device that can be tucked in or removed. If we can allow students to make simple corrections quickly, we would rather do this and let them compete than send them away. It is important to be consistent!

- If a device is unsafe but could be made safe by the removal of a part or object, allow the student to do this and continue. This must be done prior to operation. If a device becomes unsafe during the event, the supervisor must stop it at that point. Safety cannot be compromised.

- If the team cannot get their device to meet all specifications, most even s have a provision for them to continue to compete if the device will work. However, none of the devices that fail to meet specifications are allowed to rank higher than any device that did meet them. Make sure that you notify any team this affects. If a device will not operate at all, it is still important to record that the team did show up with a device and participated. Also, be sure to record any team that was absent from your event.

- If your event requires an item that must be built before the tournament (i.e. Scrambler, Towers/Bridges, Electric Vehicle, etc.), consider either some kind of permanent marking to keep the same item from showing up in next year's tournament and/or a rule that states you cannot use the same item again.

**STATIONARY / LAB PRACTICAL EVENT**

This method is very similar to the typical test that students are accustomed to, but should include hands-on applications as much as possible. Questions that ask students to observe, analyze, apply, predict, interpret, classify, measure, or explain should be used.

Please note, Science Olympiad discourages paper-and-pencil testing that resembles those given in an everyday classroom setting. Additionally, this type of format usually takes longer to grade and should be considered when preparing the event.

**Lab Event:** Teams will compete at a single lab station (Fixed) for the duration of the event. All student teams will have the exact same setup and materials to conduct a specific task identified by the Science Olympiad rules or Event Supervisor. One answer sheet per team is all that is required for grading.

Things to remember for stationary/ lab practical events:

- A student or team will sit in one location for the duration of the session. All questions and materials they will use are at that location. You will provide answer sheets so that students do not mark on the questions or other materials.

- Each team must have all questions, pictures, specimens, etc. at their disposal. If the event period is 60 minutes, prepare questions that take about 45 minutes to complete.

- Create enough questions for the event period, an answer sheet, and an answer key. Prepare at least 40 copies of the test in advance so there will be enough copies for each team.

- You are responsible for making the copies for participants. If your tournament director has agreed to make copies for you, it is up to you to make sure that (s)he has all materials that are needed, and you know where and when you can pick up the copies in advance of the tournament.

- Safety is critical: students must wear the designated safety equipment at all times.

- Materials, tools, and supplies (such as water, pH paper, reagents, etc.) are placed at marked locations for use during the labs.

- After announcing the initial instructions, you and/or your volunteers should circulate throughout the lab to observe students, answer questions, and maintain safety standards.

- When your event is finished, use your assistants/volunteers to help score the tests as quickly as possible.

**ROTATIONAL**

In this format, teams have their own set of materials or equipment to perform an experiment or the required task. If more than one station is to be completed by students during the event, it is important to have multiples of each station so every team has the same amount of time at each station and no one has to wait. This format requires more setup on the part of the Event Supervisor, which should be factored in when considering what room the event will be held in and the number of teams competing.
Be familiar with the current rules for your event, they change annually. Keep in mind, the event may vary greatly between Divisions.

**Rotational Events:** Teams rotate through multiple stations answering questions at each station. One answer sheet per team is all that is required for grading.

The Event Supervisor must choose the length of time between stations, and ensure it remains consistent throughout the day. The length of time spent at each station is determined by the maximum number of teams competing in any given session of the tournament. The Ohio state tournament will have 40 teams per division (or 13-14 teams per hour).

Choose a time that will give students the maximum time at each station without causing problems. **Note:** The event cannot run overtime. Many students must get to their next event immediately.

Warn students that anyone tampering with the materials in an effort to confuse or delay other teams will be disqualified. It is very important that the questions and materials are in the same order throughout the day.

Things to remember for rotational events:

- Create each station to require about the same amount of time. Be sure to provide enough stations for all teams present.
- Tape down the question sheets at each location.
- Safety is critical: students must wear the designated safety equipment at all times.
- Materials, tools, and supplies (such as water, pH paper, reagents, etc.) are placed at marked locations for use during the labs.
- After announcing the initial instructions, you and/or your volunteers should circulate throughout the lab to observe students, answer questions, and maintain safety standards.
- Number your stations and arrange them so students can quickly and easily move from one to the next. To ensure no one sees the questions before you begin, do roll call outside the classroom. Make sure everyone has writing utensils, extra paper, and any other required materials before they enter the room.
- Students must take their answer sheet and writing materials with them as they rotate between stations. Remind them to look at only their own answer sheet and to keep conversations at a whisper.
- When your event is finished, use your assistants/volunteers to help you score the answer sheets as quickly as possible. Most lab events are usually scheduled earlier in the day to give you sufficient time to grade.

Check out [Science Olympiad YouTube Channel](https://www.youtube.com) for videos of events!

**Impound**

Impound is the process used to check-in team-built devices before competition begins. Events that require impound are indicated in the rulebook. Tournament schedules will indicate the time and location where impound will take place.

Impound items are not to be left unattended and should not be handled by anyone other than the team that built the device, handling by others may compromise the integrity of the device.

**Rules**

You should have received a copy of your event rules after you accepted the role of Event Supervisor. You may also download a free copy of the current Rules manual from the Science Olympiad Store ([https://store.soinc.org/us/page/Welcome](https://store.soinc.org/us/page/Welcome))

It is also important to be familiar with the national official’s [Rules Clarifications](https://store.soinc.org/us/page/Welcome) and FAQs included on their website.
**Rules Clarification**

**NATIONAL RULE CLARIFICATION**

National rules clarifications/changes are made to correct or expand the rules printed in the Science Olympiad Rules Manuals. FAQs are replies to commonly asked questions. If aFAQ reply changes the meaning or corrects a rule it will be posted as a Clarification.

The official rules clarifications and FAQs apply to all states and all tournaments and originate at the national level.

**LOCAL TOURNAMENT RULE CLARIFICATION**

The purpose of clarifications is to explain rules in greater detail to avoid problems the day of the event or to include space related restrictions. Event Supervisors must submit state tournament rule clarifications as soon as possible; we post your clarifications on our state website. Local clarifications should not supersede or conflict with national rules. They are merely designed to allow for specific adjustments based on campus space related restrictions.

**Arbitration**

An arbitration board will be available throughout the day to assist with issues that may arise with an event. Head coaches are able to file appeals with the state office if they believe there are violations of rules or to challenge rulings or practice during the competition. This appeal must be completed using the arbitration/appeal form (available at Headquarters) and signed by the head coach.

Only head coaches are able to file arbitrations and only head coaches and participating students are able to ask questions during an event. Parents and non-competing students should not be involved in any discussion before an arbitration.

Event supervisors should make an effort to solve all concerns or issues before a formal arbitration is filed. Event supervisors should inform the score counselor of any known existing arbitrations prior to inputting scores.

The decision of the arbitration board is final.

**Ohio State Tournament**

**EVENT SUPERVISOR REQUEST FORM**

The state office has a limited number of supplies that may be requested for an event including stopwatches and clipboards. You may request these items by completing the Event Supervisors Request Form. This form will also ask for specific information regarding the number of volunteers you will need for your event and how many you plan to provide. You may need additional volunteers provided by the state office. You must clearly communicate any volunteer needs to the state office.

**TESTS**

Tests should be written to emphasize critical thinking and reasoning. Questions that ask students to observe, analyze, apply, predict, interpret, classify, measure, or explain should be used.

Resources can be found on the national website for Division B and Division C.

A copy of all tests, worksheets, and answer sheets are due to Ohio Science Olympiad (scienceolympiad@osu.edu) two weeks prior to the state tournament.

Tips for designing test layouts for easier scoring:

- Evenly spaced, aligned, and sized answer boxes.
- Instructions on first page, questions on subsequent pages so students can read them without starting the test.
- All questions worth the same point value.
Header of each page has a place to put total score (alternating left to right for double sided documents).

Header on 1st page has a place to record the final score.

Every page has a place for team number and student names in case pages get separated.

Questions/pages are all sequentially numbered so students will notice in case a page is missing.

**SCORING**

1. **Computer Based Scoring**: Utilize the Excel-based (preferred) or paper score sheet provided by the state office for recording raw scores, tiers, and tie breakers. Do not enter ranks, they will be auto-calculated. Instructions are included on the sheet. Using the Excel-based score sheet will reduce the chances of scoring errors and facilitate easy data transfer to the master scoring computer. Please use a descriptive name when saving the score sheet (e.g. OpticsDivC.xls). Printers and computers are available at the tournament HQ for you to utilize when finalizing scoring.

2. **Tie Breakers**: All teams who participate and compete according to the rules must be scored and ranked. Please account for all teams and make every effort to break ties according to the event rules guidelines. Tie-breaker questions should be selected on the test before the tournament to help eliminate ties at the raw score level.

3. **Tiers**: Teams/devices that don’t meet the requirements in the event rules must be allowed to compete if possible and are to be notified, scored, and ranked below those who met all specifications (“tiered”). Teams may be allowed to modify any device before it is impounded to bring it into compliance with the rules. Any modification must be completed before the end of the impound period.

4. **Participation Points**: Teams who attempt to participate that cannot be assigned a raw score (e.g. safety hazard, mechanical failure, wrong dimensions, etc.) must receive a “P” for Participation as the raw score on the score sheet.

5. **No Shows**: If a team does not show up or does not make an attempt to participate, the team must be given a “NS” for No Show as the raw score on the score sheet. This includes teams who may be present but display no preparation for the competition.

6. **Disqualifications**: Teams that misbehave (including excessive use of improper or vulgar language), fail to abide by the Science Olympiad Code of Ethics, or cheat must receive a “DQ” for Disqualified as the raw score on the score sheet. This action will disqualify the affected student(s) from participation and scoring in that event only. If any team is Disqualified, inform the student (and remind the student to inform their coach) as soon as a problem occurs. Notify the coach immediately if it happens after students have left.

7. **Sort Orders**: Since different events are scored differently, be sure to indicate whether high scores or low scores are better, both for the raw score as well as for tie breakers.

8. **Event Documentation**: Provide raw scores and any documentation (answer sheets, answer key, etc.) as soon as possible after your event is done. Please contact the tournament HQ if you need additional assistance grading or tallying your results. Help is available at the tournament HQ to grade or tally results.

9. **Score Counseling**: When turning in your scores, you will be asked to participate in a score counseling session to discuss the event results using the following process and the checklist on the next page. Please plan on spending at least 20 minutes at the tournament HQ, possibly longer if issues are found. If you send someone in your place, please be sure they know enough about the event to address questions or can quickly contact you via cell phone.

10. [Ohio Science Olympiad Scoring Guidelines and Scoring Counseling Checklist](#)

**TOURNAMENT DAY**

**Check-In**

It is important for Event Supervisors to check-in at Headquarters prior to finding their event area. At check-in you will receive important information for the tournament day.

Event Supervisors may check-in beginning on the Friday of the state tournament between 5:00 PM - 8:00 PM and on Saturday starting at 6:30 AM. Check the state website for details and all local tournament updates.
**Wristbands**

**Wristbands must be worn on the student’s wrist to compete in the Ohio Science Olympiad State Tournament.** Students will NOT be permitted to compete in an event without a wristband.

- Must be worn on the wrist ONLY (NOT on ankles, belts, belt loops, neck, etc.).
- Must be secured tight enough so they cannot be slipped off, but not too tight. Wristbands may be confiscated if they can be slipped off.
- Wristbands are NOT interchangeable between students. Event Supervisors are advised to send all students without a wristband back to their coach.
- If a wristband is defective, damaged or needs replaced, the coach must bring the wristband AND the student to Headquarters for a replacement before they are allowed to compete.
- Event supervisors will check to see that students have their wristband in place before their event begins. This may be done while taking attendance.
- Trial Events: Alternates do not need to wear a wristband to compete in trial events (wristbands are not required for Trial Events).
- Fun Events: Wristbands are not required to participate.

**Lunches / Snacks**

Lunch will be provided to all Event Supervisors and volunteers. Please let us know your lunch preferences and those of anyone you will be bringing to assist with your event by completing the [Event Supervisor Request Form](#) in advance of the tournament. Lunches will be delivered to your event area starting at approximately 11:00 a.m. Please notify your building host if you do not receive lunches by 1:00 p.m.

Snacks will be given to Event Supervisors when they check-in at Headquarters. If you do not check-in at headquarters, you will not receive your snacks for the day.

**Schedule**

You can find a draft of the schedule on the state tournament website.

**Notifications**

Event updates will be sent via text message through Remind. If you have not signed up please consider doing so. Text @eventsu to 81010 from your mobile device (you must sign-up every tournament year). The state office will not respond to emails after the Thursday before the state tournament.
Agreements

By agreeing to serve as an Event Supervisor, I agree to:

1. Approach/Facilitate/Implement/Supervise event(s) with fairness and respect for the participants and their coaches.
3. Prepare event(s) in accordance with the current year’s event rules and provide challenging and engaging events for participants.
4. Adhere to ALL deadlines provided by Ohio Science Olympiad.
5. Review all emails, documents, and training manuals provided by Ohio Science Olympiad.

If you agree to the above please sign and date below.

_________________________________________  ___________________________
Event Supervisor Signature                     Date

_________________________________________  ___________________________
Tournament Director Signature                  Date