



Kansas Science Olympiad

**Welcome
New Coaches!**



Science Olympiad Philosophy

To improve the quality of science education, increase student interest in science, and provide recognition for outstanding achievement in science education by both students and teachers.

Have fun doing and learning some science!



History of Science Olympiad

- Started in 1985 after successful state tournaments in Delaware and southeastern Michigan.
- Seventeen states participated in that tournament; now there are over 13,500 schools from all 50 states participate.



History of Science Olympiad

- The first state of Kansas tournament was held in April 1988 at WSU.
- Currently we have 4 regional tournaments that serve as qualifying tournaments for state. About 60 middle and 60 high schools participate at regional tournaments.
- The top two teams in each region plus a percentage are invited to state for a total of 30 teams in each division.

Events - Chemistry Lab





Events - Rocks & Minerals





Events - Road Scholar



Events - Write It Do It





2020 Physical Science & Chemistry Events

- Chemistry Lab (C)
- Circuit Lab (B & C)
- Crime Busters (B)
- Density Lab (B)
- Food Science (B)
- Forensics (C)
- Machines (B & C)
- Protein Modeling (C)
- Sounds of Music (C)



2020 Earth & Space Science Events

- Astronomy (C)
- Dynamic Plant (B & C)
- Fossils (B & C)
- GeoLogic Mapping (C)
- Meteorology (B)
- Reach for the Stars (B)
- Road Scholar (B)



2020 Life, Personal, & Social Science Events

- Anatomy & Physiology (B & C)
- Designer Genes (C)
- Disease Detectives (B & C)
- Heredity (B)
- Ornithology (B & C)
- Water Quality (B & C)



2020 Technology & Engineering Events

- Boomilever (B & C)
- Detector Building (C)
- Elastic Launched Gliders (B)
- Gravity Vehicle (C)
- Mission Possible (B)
- Mousetrap Vehicle (B)
- Wright Stuff (C)



2020 Inquiry & Nature of Science Events

- Codebusters (C)
- Experimental Design (B & C)
- Game On (B)
- Ping-Pong Parachute (B & C)
- Write It Do It (B & C)



Event Information

Additional info about the events, as well as materials to download or purchase, can be found at the Science Olympiad (national) website:

www.soinc.org

The screenshot shows the Science Olympiad website interface. At the top, there is a dark navigation bar with a 'MENU' link on the left, 'My account' and 'Log out' links on the right, and a search icon. Below this is a header section with the Science Olympiad logo on the left and the text 'SCIENCE OLYMPIAD' in large white letters on the right. Under the logo is the tagline 'Exploring the World of Science'. Below the header, there are two buttons: 'View' and 'Devel'. The main content area features a green banner with the text 'GET READY FOR THE 35TH ANNIVERSARY SEASON!'. Below the banner, a paragraph of text describes the organization's history and activities. At the bottom, there are three image thumbnails: 'Tournaments' showing a group of students and adults celebrating, 'B/C Events' showing students working on a project, and 'State Websites' showing students holding a banner for 'Daniel Wright'.

MENU My account Log out

SCIENCE OLYMPIAD

Exploring the World of Science

View Devel

GET READY FOR THE 35TH ANNIVERSARY SEASON!

Free [online Rules Manuals](#) available now! Founded in 1984, Science Olympiad is one of the premier science competitions in the nation, providing rigorous, standards-based [challenges](#) to nearly 8,000 teams in all 50 states. We host 450 [tournaments](#) annually on college campuses and hold professional development [workshops](#) that showcase innovative science, technology, engineering and math (STEM). Form a team and join through your [State Chapter](#) today!

Tournaments

B/C Events

State Websites



Getting Started

To compete in the Kansas Science Olympiad, you must complete the following:

- complete Online Registration (<https://scilympiad.com/ks>)
- mail in Registration Invoice with Check
- form your Science Olympiad team
- practice, practice, practice!

More info can be found at KSO website:

sites.google.com/view/ksscioly

Or at the National SO website:

www.soinc.org



Getting Started - KSO Website

KSO Home

[Home](#) [News](#) [About](#) [Tournaments](#) [Events](#) [KSO Login](#) [Q](#)

Kansas Science Olympiad

Welcome to the new home for Kansas Science Olympiad! Please follow the navigation below to find more information on this program. Any additional questions can be directed to Jill Fisher at jill.fisher@wichita.edu or 316-978-6503.

[News and Quick Information](#)

[About Kansas Science Olympiad and Additional Resources](#)

[Tournaments](#)

[Science Olympiad Event Lists \(Divisions B and C\)](#)

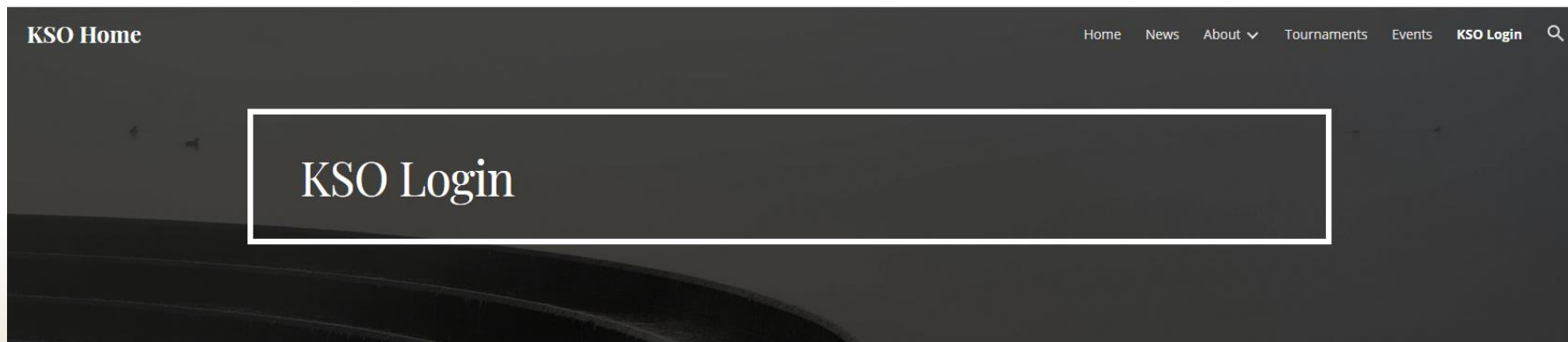
[KSO Login \(For Coaches\)](#)





KSO Registration

Complete your on-line Kansas Registration Form



All coaches, tournament directors, and event coordinators are invited to use the new [Kansas Science Olympiad registration site](https://scilympiad.com/KS). After creating a new user profile, please make sure to designate your role. Tournament directors will need the state director to register them as such. **ALL COACHES MUST USE THIS PROGRAM TO REGISTER THEIR TEAM(S)!**

This program has been made possible by Scilympiad from SoCal Science Olympiad.

Link to registration:
<https://scilympiad.com/KS>



KSO Registration

Complete your on-line Kansas Registration Form

Kansas Science Olympiad

[Coaches](#) [Tournament](#) [Policies](#) [Volunteer](#) [Resources](#) [Log in](#)



Exploring the World of Science

Science Olympiad is nationwide competition. Students compete in 23 events that include earth science, biology, chemistry, physics, and engineering. Science Olympiad is designed to increase a student's interest in STEM fields and provide recognition for outstanding achievement in team events. Students compete in Science Olympiad with the top teams advancing from Regional to State to National levels.

Questions about Kansas Science Olympiad can be directed to Jill Fisher at jill.fisher@wichita.edu.

[Register your school](#)

[Participating schools](#)

[Division B Events](#)

[Division C Events](#)



KSO Registration – Continued

Completing your Kansas registration automatically registers you for a regional tournament. Registration should be completed by November 8, with regional assignments made by November 15.

(Please note that in some areas of the state, the regional tournaments have been near capacity. In those cases the earlier you register, the greater the chance you will be assigned a spot in the regional of your choice.)

Regional assignments for teams registering after November 8 will be made on a case by case basis.

Last day to register is December 6, 2019.



Organizing a Team

A Science Olympiad Team consists of no more than 15 competing members.

- Team members must all attend the same school except that a middle school team may ask a maximum of 5 ninth graders that were on the team the previous year to return.
- Middle School / Junior High teams may not have more than five 9th graders
- High School teams may not have more than seven 12th graders.
- There is no minimum number of students on a team.



Organizing a Team

- If more than 15 students want to be on the team, many schools hold a mini-Olympiad to determine team members.
- Various subgroups of these 15 team members then compete in individual events. Most events allow two students although some allow three.
- Although the event may allow for two students to participate, it is permissible to send only one.
- You do not need to compete in all events.



Preparing a Team

- You can't do it all yourself.
- Enlist the help of other teachers and parents.
- Have one person concentrate on the events in a particular subject area: chemistry, biology, technology, etc.
- Ideally one coach per event.



KSO Website Calendar

2019-2020 KSO Calendar

Kansas Science Olympiad

Today ◀ ▶ Friday, September 27 ▼ Week Month Agenda ▼

Saturday, September 28	
9:30am	KSO Coaches Workshop (WSU)
Saturday, October 5	
9:30am	KSO Coaches Workshop (Garden City)
Friday, November 8	
KSO Priority Registration Deadline	
Friday, November 15	
KSO Priority Regional Assignments	
Friday, December 6	
KSO Final Registration Deadline	
Tuesday, February 4, 2020	
KSO Salina Regional (Division B)	
Thursday, February 6, 2020	
KSO Salina Regional (Division C)	
Wednesday, February 19, 2020	
KSO Hays Regional (Division C)	
Friday, February 21, 2020	
KSO Hays Regional (Division B)	
Saturday, February 29, 2020	
KSO Northeast KS Regional	
KSO Wichita Regional	
Friday, March 6, 2020	

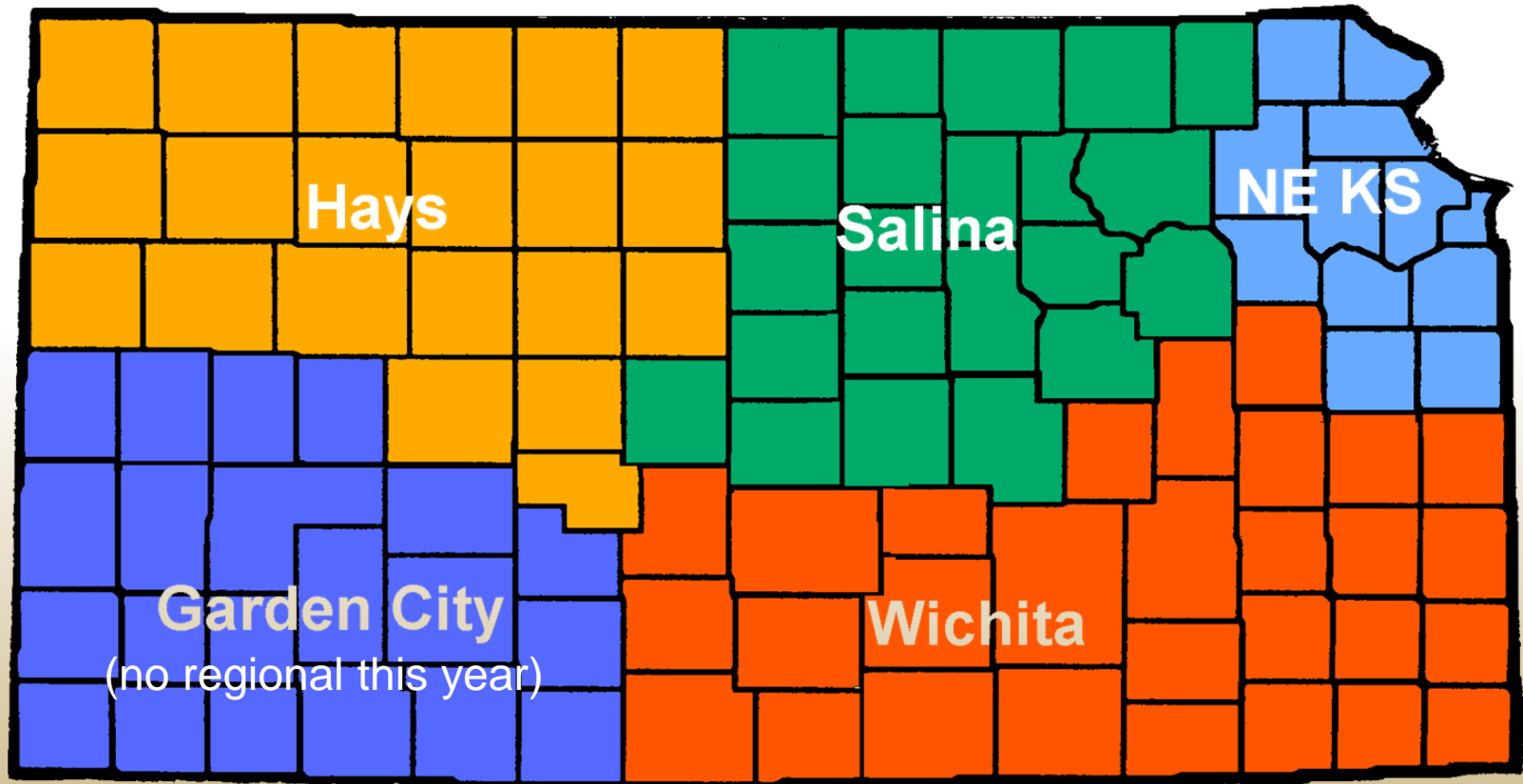
Google Calendar

Google Calendar Link:

<https://calendar.google.com/calendar/b/1?cid=bjNrOGVrbmpsajE4aWo4b3I0MHFsZDI0bG9AZ3JvdXAuY2FsZW5kYXIuZ29vZ2xlLmNvbQ>



2020 KSO Regional Information



You are not required to attend the regional where you are located—you can choose whichever is most convenient.



State Invitations

- Top two teams from each Regional (guaranteed)
- Additional invitations based on number of teams that compete in regional



State Invitations for Regional Winners

Issue invitations to 1st place regional finishers if their team does not qualify for the state tournament

- Win medal if one of the top three places in what would be their school's division
- Does not affect other medals awarded
- Does not affect team point totals
- Adds a handful of students to the tournament



Division Schedule

2008 Kansas Science Olympiad Schedule – Division B

Event	Room	Impound	9:00 - 9:50	10:00 - 10:50	11:00 - 11:50	12:00 - 12:50	1:00 - 1:50	2:00 - 2:50	3:00 - 3:50
Amphibians and Reptiles	304 Hubbard								
Anatomy	339 Hubbard								
Balloon Launch Glider	Haskell Gym								
Bio Process Lab	532 Hubbard								
Crave the Wave									
Disease Detectives	209 Hubbard								
Ecology	211 Hubbard								
Food Science	111 McKinley								
Meteorology	224 McKinley								
Metric Mastery	307 Hubbard								
Mystery Architecture	412 Hubbard								
Oceanography	104 Geology								
Reach for the Stars	127 Jabara								
Road Scholar	215 RSC								
Robo-Cross	223 RSC	7:45-8:30							
Rocks and Minerals	105 Geology								
Science Crime Busters	202 McKinley								
Science Word	007 RSC								
Scrambler	Ballroom	7:45-8:30							
Simple Machines	021 Jabara								
Tower Building	223 RSC	7:45-8:30							
Trajectory	RSC Ballroom	7:45-8:30							
Write It, Do It	305 RSC								



State Tournament Scoring

Place	Score
1 st	1 pts.
2 nd	2 pts.
3 rd	3 pts.
...	...
No participation	31 pts.
Disqualified	32 pts.

Awards

- Large school and small school divisions
 - High school – 800 students
 - Middle School – 500 students
- Medals in each event
- Team trophies
- Invitation to the National Tournament





General Event Rules



General Event Rules

- Teams may not interpret the rules so that they have an unfair advantage over the rules or another team.
- Once teams have entered the event area to compete, they may not
 - leave until they are finished
 - nor return once they have left
 - nor communicate with outside resources, including people, places, etc., by any means



General Event Rules

- Unless otherwise stated, it is generally understood that if notes, resources, calculators, actions, etc., are not excluded, then they are permitted unless they violate the spirit of the event.
 - This effectively excludes the use of any computer, tablet, calculators, wireless devices, phones, etc., that have access to external communication or data retrieval during an event unless specifically permitted.



General Event Rules

- Safety is of the utmost importance. Event supervisors are obligated to prevent unsafe acts and devices.
- Safety decisions are not subject to appeal as long as they are applied equally to all teams.
- Contestants may not bring or use
 - flammable liquids or flame sources of any type, such as matches, cigarette lighters, alcohol and acetone
 - nor bring or use acids/bases of any concentration except for lemon juice, vinegar and other mildly acidic/alkaline naturally occurring substances.



General Event Rules

- One or more of the 15 current team members must have constructed all pre-built devices presented for judging. Any of the current team members may impound/demonstrate/operate the device at the competition unless stated otherwise in the rules.
- Any team member designated by the coach can impound devices unless stated otherwise in the rules.
- Once a device is removed from the competition area appeals will not be considered.



Mentoring

- Adults may act as facilitators in the building process
 - by asking questions
 - offering ideas or suggestions
 - provide references.
- Adults may teach
 - underlying principles and skills
 - use of tools and adherence to safety rules
 - perform restricted tasks (such as drilling a hole in a metal plate or operating a power saw)



Mentoring

- Adults may not
 - Construct or assemble any component of the project
 - Interfere with, alter, build or compromise the student or group design

The students must prepare the entire structure, including accompanying charts, graphs or notes.



Mentoring

- Students may be extensively questioned on device's:
 - overall design and construction
 - component parts and how they operate and function within the device
- Each team coach will be required to certify that all work presented for the tournament complies with the Building and the Use of Tools Recommendations
- If the above items cannot be met, the team will be disqualified



Eye Protection

If eye protection is required rules will indicate the category needed: A, B, or C

https://www.soinc.org/eye_protection



Eye Protection - Category A

- Description
 - Non-impact protection
 - Provide basic particle protection only
- Corresponding ANSI designation / Required marking: **Z87**
- Examples
 - Safety glasses
 - Safety spectacles with side shields
 - Particle protection goggles
 - Seal tightly to face
 - Direct vents around sides (holes that can be seen through in a straight line)

Eye Protection - Category A



Safety Spectacles



**Safety Spectacles
with side shields**



**Particle Protection
Goggles**

Eye Protection - Category B

- Description
 - Impact protection
 - Provides protection from high velocity or high mass particles
- Corresponding ANSI designation / Required marking: **Z87+**



High Impact Safety Goggles (Z87+)

Eye Protection - Category C

- Description Non-impact protection
 - Indirect vent / chemical splash protection
 - Seals tightly to face completely around eyes
 - Indirect vents (no direct path through hole)
- Corresponding ANSI designation / Required marking:
Z87 or Z87 D3 (the D3 designation is not required)



Indirect Chemical Splash Goggles

Eye Protection

- Goggles marked with **Z87+** with indirect vent chemical / splash protection qualifies for all three categories
- VisorGogs
 - Do not seal tightly to face
 - Qualifies as indirect vent / chemical splash protection





Eye Protection

- Contestants are responsible for providing their own protective eyewear.
- Teams **WILL NOT** be allowed to compete without adequate eye protection. This is **NON-NEGOTIABLE.**



Eye Protection Suggestion

- Suggest that coaches purchase a dozen High Impact Chemical / Splash Goggles (**Z87+ D3**).
- Enough for the whole team.
- Should prevent students showing up for an event with inadequate eye protection for that event.



**General Event Rules/Tips and
Eye Protection
can be found on the
KSO or NSO websites:**

**<https://sites.google.com/view/ksscioly/about>
www.soinc.org**



KSO State Official

State Director:

Jill Fisher

Fairmount Center for Science and Mathematics Ed.

Wichita State University

Wichita, KS 67260-0032

Phone (316) 978-6503

Fax (316) 978-3350

e-mail: jill.fisher@wichita.edu