



SC21

St. Louis, MO | science & beyond.

**SC21 Student Cluster Competition:
The final approach**

Key things to know:

- Calendar of events
 - And which are required for teams
- Team and committee communication
 - Zoom office hours (only for committee questions)
 - Slack
 - Committee liaisons
- Rules for teams
 - Zoom presence
- Rules for advisors
- Benchmarking rules and tips
- Submitting results
- Poster
- Scoring
- Leaderboard and cloud spend

Calendar of Events

Official Students@SC Events:

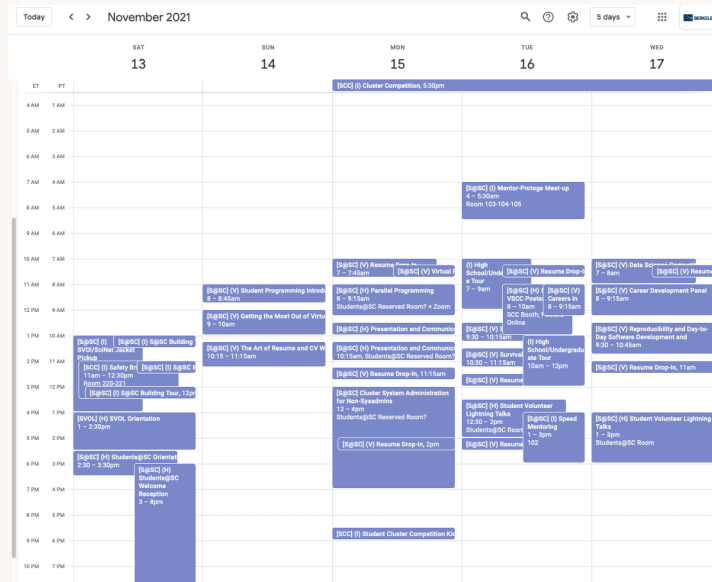
<https://sc21.supercomputing.org/program/studentssc/#schedule> +

Students@SC Guidebook:

https://calendar.google.com/calendar/u/1?cid=M2s4MXJvdmE1cGw3NHY1OGozanRibnEzb2dAZ3JvdXAuY2FsZW5kYXluZ29vZ2xlLmNvbQ*

+ note: hyperlink doesn't export correctly, you will need to scroll down the webpage to reach the schedule

*Includes student programming and other student program events



Mandatory SCC Events

Pre-Competition	During Competition	Post Competition
SCC Safety Briefing <i>Sat Nov 13, 1-2:30pm CST</i>	Daily Standups <i>Mon-Thu, 9-9:30am CST</i>	Awards Ceremony <i>Thu Nov 18, 12:30-1:30pm CST</i>
Students@SC All Students Orientation <i>Sat Nov 13, 4:30-5:30pm CST</i>	SCC Kickoff + Zoom Photo <i>Mon Nov 15, 7:30-8pm CST</i>	SCC Wrap-up <i>Thu Nov 18, 2-3pm CST</i>
	Office Hours for Each App <i>Varies</i>	
	Poster Judging <i>Varies</i>	
	SCC End <i>Wed Nov 17 5:30pm CST</i> All tasks must be submitted by this time!	

Communication

- Slack for team communication:
 - sc21studentssc.slack.com
 - Our channel is **#students-scc-vscc**
 - Contact Stephanie Brink if you do not have access
- Zoom for competition, events, and daily check-ins:
 - Will be provided later
- Committee Liaisons
- Public viewing
 - Your supporters and the general SC population can watch the leaderboard and cloud spend as well as checking out your posters and lightning talks by following the links at
 - <https://sc21.supercomputing.org/program/studentssc/student-cluster-competition/>
 - <https://www.studentclustercompetition.us/>

Zoom Presence

Teams are required to have at least 2 team members available in Zoom Team Breakout Rooms during the Exhibit Floor hours:

Mon, Nov 15 8pm-9pm CST

Tue, Nov 16 10am-6pm CST

Wed, Nov 17 10am-6pm CST

Thu, Nov 18 10am-3pm CST

[Link to Zoom Team Breakout Rooms in SC21 Platform](#)

Rules for Advisors

- Once competition starts, student teams are not allowed to receive assistance from anyone including their advisor(s) and mentor(s).

Benchmarking rules and tips

IO500:

- Code: `git clone -b io500-sc21-scc` <https://github.com/IO500/io500>
- Compilation: `cd io500; ./prepare.sh` more information: <https://io500.org/pages/running>
- Execute: `mpirun -np X ./io500 config-scc.ini`
- For 1 node submissions declare in the ini file `drop-caches = TRUE` (needs sudo)
- IO500 SCC rules: <https://io500.org/rules-scc-submission>
- Stonewall should be 30 seconds (stonewall-time parameter in the ini file), if you want to test the benchmark, you can decrease the time.
- Be sure that there is no INVALID or error in your output.
- Provide us the execution command (or script) and the directory in the results/ with the best results

Submitting Results

- Results should be submitted to designated Azure and Oracle cloud storage locations.
 - a. Detailed information will be released weekend before competition
- To prepare for the submission step create the following directory structure:
 - a. Create a top-level directory for each application or benchmark
 - b. Where there are multiple tasks, create a subdirectory directory for each task and name the directories task1, task2, task3, etc.
 - c. Place results files and other required artifacts for each task in the corresponding directory

Posters

The poster judging schedule blocks are below. Emails will be sent out to advisors to sign up for judging times. Each hour block will have up to three teams presenting.

Presentations should be ~15 minutes with 5 minutes for questions from the judges.

Cisco Webex meeting links will be sent out to teams once times are arranged.

Tuesday, November 16th 11-12am CST
Tuesday, November 16th 8-9pm CST
Tuesday, November 16th 9-10pm CST
Wednesday, November 17th 11-12am CST

Scoring

- Application interviews
- Posters + interviews
- Benchmarking
- Cardiod
- Quantum Espresso
- Mystery Application
- Reproducibility Challenge

Penalties

- Exceeding Azure cloud budget
- Preventing Monitoring Polling
- Only use cloud resources provided

Making the most of the SC experience

- Students@SC hosts many valuable sessions
 - Resume workshops, mentoring, data science competition, etc
- The technical program is open to SCC/VSCC participants

Q&A