



Niagara Regional Science and Engineering Fair

Judges Manual

April 2023

Main Contact Information:

Judge in Chief: Dr. Tyler Pyley, MD, FRCPC
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Important Dates:

Fair Date..... April 1, 2023

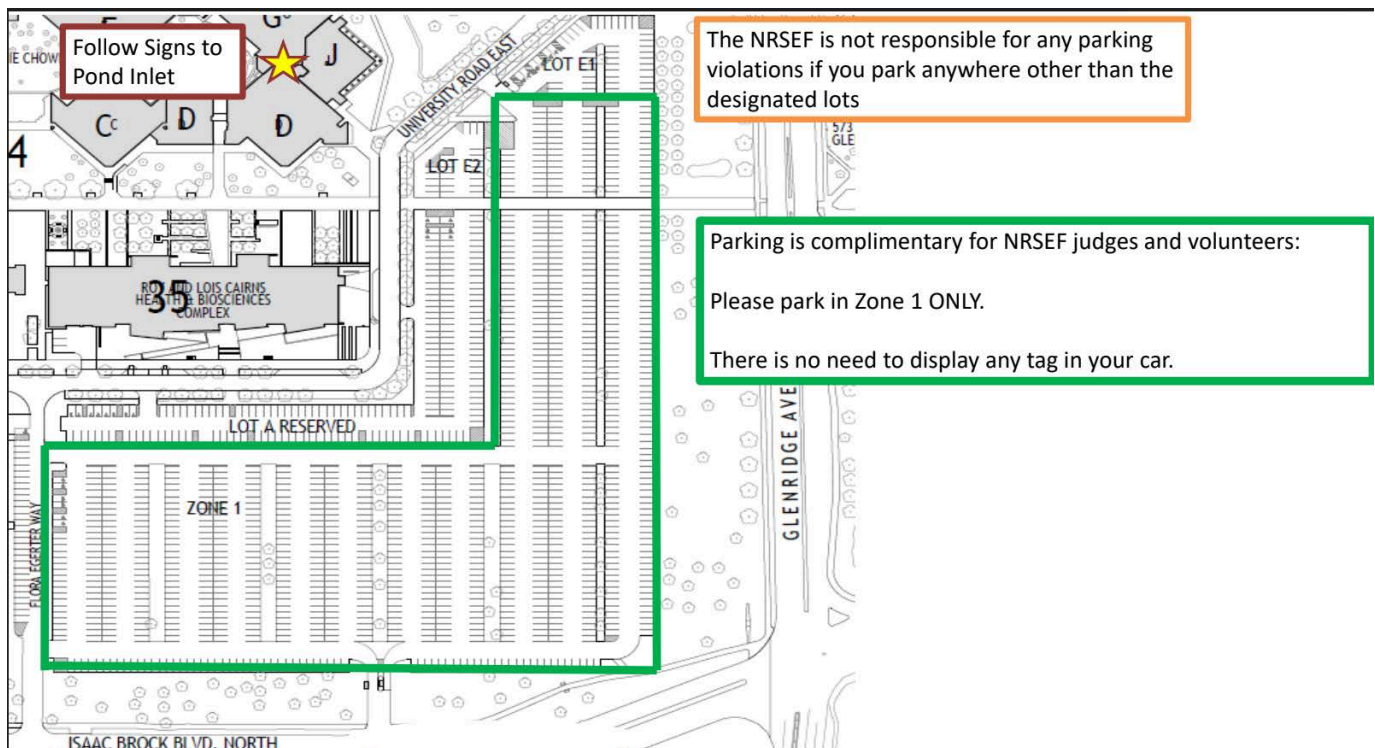
Location..... Brock University (1812 Sir Isaac Brock Way, St. Catharines, L2S 3A1)

Meeting Location..... D308, Mackenzie Chown Complex

Meet at 8:30 for the morning session, 12:30 for the afternoon session

Note: There will be coffee and snacks provided in the judges room and lunch will be served from 12:00 noon to 1:00pm free of charge.

Parking..... **FREE - Please park in Zone 1**
(accessible in front of the Cairn's building). If you enter from the main 406 entrance (St. David's Rd. to Sir Isaac Brock Way), take the first right into the Zone 1 parking lot and drive north towards lot E.



Judging Sessions and Time Line

There are two judging sessions, one in the morning and one in the afternoon. During each session, different groups of students are present for judging, while the other half is busy doing workshops.

Morning Session (9:00am to 12:00pm):

During this session, Junior (Grades 7-8), Intermediate (Grades 9-10) and Senior (Grades 11-12) projects will be evaluated.

At 8:30 judges are asked to meet in D308. Here you will pick up your name badge, project file, and receive a quick description of what is expected of you, as well as some changes for this year. From 8:45 to 9:00am you will be free to peruse through the projects before the students arrive at 9:00am. You are asked to periodically submit your completed marking sheets to the judging room (upper floor, D308) or to a volunteer wearing a green shirt for input. Please ensure all marking sheets and your morning folder are submitted before you leave for lunch but keep your name badge if you will be judging in the afternoon.

Lunch (12noon to 1:00pm):

Lunch is provided **FREE OF CHARGE** for all judges and volunteers at Decew Dining Hall. Pick-up your lunch coupon in the judging room when you turn your morning folder in.

Afternoon(1:00pm to 400pm):

During this session, Juvenile (Grades 5-6), Intermediate (Grades 9-10) and Senior (Grades 11-12) projects will be evaluated.

ALL judges are to report to D308 again to pick up their afternoon folders.

NEW afternoon judges are asked to report to the judges lounge (D308) at 12:30pm to pick up their badge, project file and receive a quick description of what is expected. From 12:45pm to 1:00pm you will be free to peruse through the projects before students arrive at 1:00pm. You are asked to periodically submit your completed marking sheets to the judging room (upper floor, D308) or to a volunteer wearing a green shirt for input. Please ensure all marking sheets, your afternoon folder, and name badge are submitted before you leave

Wine & Cheese:

You are cordially invited to join the NRSEF committee for a special wine and cheese reception, located in the Scotiabank Atrium in the Cairns Complex, from 3:30pm to 7:00pm.

What to wear

Attire is business casual. Comfortable shoes are a great idea! You will be standing for most of this process. Remember that judges represent scientific authority to students.

Judging Process

Note 1: **NO** project deserves a grade below 25%, and equally **NO** project deserves a 100%.

Note 2: Review the rubric (on nrsef.ca under "judging") to familiarize yourself with the evaluation

Step 1: Introduction and Interview

Present yourself to the student and greet them with a short introduction. Some students are shy or are easily intimidated. Please try to keep this in mind. You may have to lead the young students along their presentation such as: "What is the purpose of your project?", "What did you hypothesize the results would become?"

Step 2: Marking

Once the interview is completed, make your way to the benches or chairs provided to complete your marking sheet.

DO NOT expose or mark students during your interview.

Step 3: Submitting Marking Sheets

As soon as practical, please submit your completed marking sheets to the judging room upstairs or to a volunteer for entry. Please submit these "as you go" and not all at the end to make entry easier.

Step 4: Time

Remember to keep interviews to 10-20 minutes for juvenile and junior, and about 30-40 maximum for intermediate and seniors.

Remember to submit grade forms as soon as complete.

Remember to get your lunch in the cafeteria (and get a coupon in the judging room first).

Remember to come to our wine & cheese reception.

What to avoid

Avoid overly critical remarks that could discourage students. They are motivated leaders of their classes and can take offence to your comments. Foster their ideas and encourage them to continue their work.

Keep all suggestions positive and encouraging.

Do not expose the evaluation sheet to students and do not mark projects at project booths.

Be mindful about who could overhear your conversation.

FAQs

What do I bring to this event?

Pen or pencil. If you need glasses, please bring them. The rubric text is small !!!

What to do if student(s) are not at their project?

There are legitimate reasons for student(s) not to be present. Please skip the sequence and visit your next project and attempt to come back when the student(s) are present. If the student(s) cannot be located, please bring attention of this matter to a committee member or the Judge in Chief.

Should I share my results to other judges?

No. Each judge should act independently and should not discuss their evaluations to other judges until the judging process is completed to avoid any external influence in the marking process.

Can I refer a project to another judge?

Yes. If you think you have found an excellent project that you would like a friend/colleague to see, refer the project. But don't discuss the project until judging is complete.

I was given a French project to judge and I don't speak French?

There are roughly 30% of the projects in French. Many French projects can be evaluated in English as these students speak English so in many cases the language barrier really isn't a problem. If you have received a French project and you don't feel comfortable interviewing the student(s), please return your evaluation sheet to the judges room.

I am an Engineer, why do I have a Biology project?

We try to assign judges at least three projects in their area of expertise, and we also try to assign a judge to projects outside their field. This forces students to explain their project and concepts to someone unfamiliar with the topic.

I am done early, now what?

Please come back to the judge's room to pickup any forms of projects that still need marking. These are due to judges that do not show or other reasons.

How many categories are there?

There are four categories:

Juvenile:	Grades 5 & 6
Junior:	Grades 7 & 8
Intermediate:	Grades 9 & 10
Senior:	Grades 11 & 12

Who developed the rubric evaluation sheets?

The rubrics were originally designed by Youth Science Canada (YSC), the national body that governs science fairs and project based science rules across Canada. NRSEF has adopted their basic rubric and it is periodically revised based on feedback from judges.

Is there more than one type of judge?

Yes. There are two types of judges: regular grand award judges (90%), and special awards judges. Most judges are grand award judges who judge in the general judging pool for the grand awards (first, second, etc. and potentially a trip to the Canada-wide science fair). Special awards judges judge for a specific company or institution sponsored award and often have their own criteria.

How important is accuracy in the rubric evaluation?

Very important. While every judge has a different opinion on what makes a good project, the rubric breaks down each aspect to make evaluations more consistent. Each project is evaluated about 5 times to apply statistical evaluations to rank students. Final ranking is determined based on statistical average and, potentially, an oversight committee where discrepancies exist.

No project should be awarded a grade below 25%, nor should any project receive 100%. This would indicate that you are not properly evaluating the project to the rubric.

How many judges will each project get?

Each project is guaranteed 5 regular (grand award) judges. Some will receive special awards judges.

What should I do if I believe the student did not do the project?

Determining if the student did not do the work in the project is impossible to demonstrate. Evaluate all projects as if the students did the work but be mindful of the student's knowledge of the topic. The students' answers to questions (and hence knowledge of the topic) will be reflected in the final mark.

This project is a continuation of Last Year ... how do I evaluate it?

Where a project is a continuation from a previous year, it will have a "continuation form" displayed conspicuously. That form will outline what has changed since last year. Evaluate the project based on what is new only, and not what was done last year.

The student used an online resources (e.g. sciencebuddies) ... how do I evaluate it?

Online resources are a great source of ideas. Where a project is simply a regurgitation of an online project, it will do poorly due to lack of creativity and originality. We expect students using such resources to go further and not simply "clone" an online project. Through the interview, try to determine what the student actually came-up with themselves and mark this accordingly. A bibliography is also mandatory and may help in determining the source of the project.