

Our 2019 Build Season
by Week

1

Week 1

- Kickoff
- Strategic Design
- Prototyping
- Drivetrain
- CAD Design

2

Week 2

- Finalize Subsystem
- CAD Designs
- Begin fabrication

3

Week 3

- Final Fabrication
- Drivetrain complete
- Begin Assembly of Subsystems

4

Week 4

- Finish Assembly of Subsystems

5

Week 5

- Full robot assembly
- Start Second Robot

6

Week 6

- Full Programming
- Programming Tuning



Henry Sibley High School

Lightning Turtles Robotics

Build Season Newsletter Week #6

February 10th - February 22nd

COME SEE OUR TEAM & ROBOT AT OUR OPEN HOUSE!

We are Hosting an Open House at
Henry Sibley High School!



We will be recapping our season, showcasing our robot, and hold a meet-and-greet in Warrior Hall! All sponsors, parents, students, mentors, friends, and family are welcome!

When:

Tuesday, February 26th, from 7PM - 8PM

Where:

Henry Sibley High School (1897 Delaware Avenue, [Directions](#))

INSIDE:

WEEK
ZERO

OPEN
HOUSE

ROBOT
REVEAL!

THANK YOU
MENTORS!

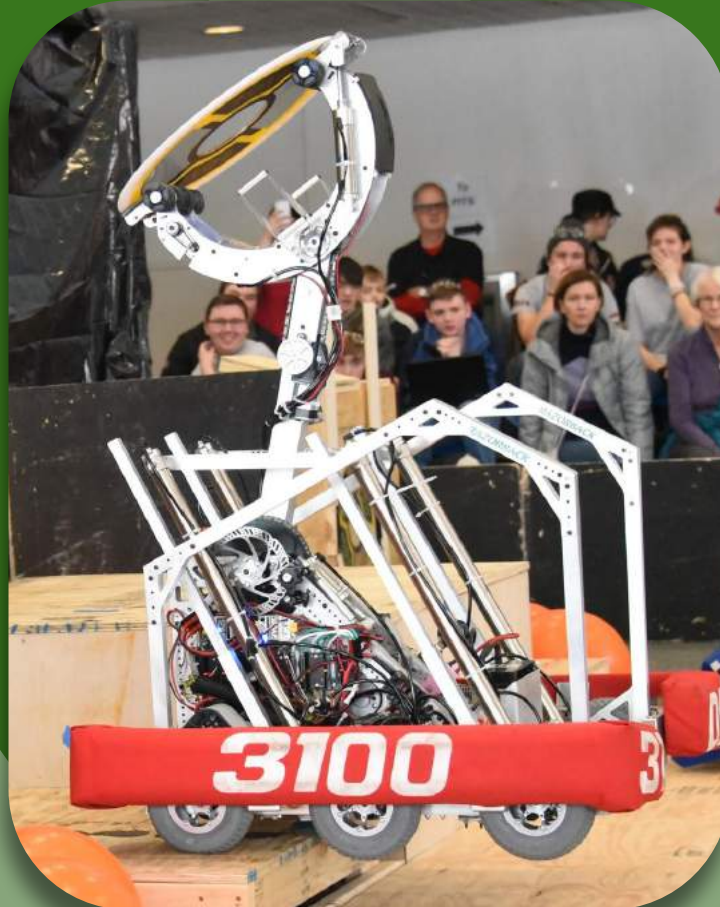
DULUTH
NORTHERN
LIGHTS

AND
MORE!

Announcing!

RAZORBACK

Our 2019
Robot!



It was a tough 6 weeks, but we did it!

Announcing our newest robot: Razorback!

Razorback will play the #DestinationSpace game well - by quickly collecting & placing hatch panels, picking up and depositing cargo, and at the end of the match - climbing up onto a 19" high HABitat platform. This is by far the most complex and capable robot we've ever built, and we are all very proud and anxious to compete!

BAG DAY (LOOKING AHEAD!)

Bagging and Tagging our Bot

Finishing just minutes before the official deadline, we bagged our robot on Tuesday, February 19th at 10:55p! It's ready to roll out to our upcoming competitions.



What's Next?

We were lucky that we could afford to build a second practice robot for the first time this year. We will continue to fine-tune our programming and the parts we were allowed to keep out of the bag. We're getting ready for our first competition - just 2 weeks away! Take a look at our [website calendar](#).

Thank You, Volunteers!

We would like to extend our gratitude and thanks to our Build Season meal providers and donors - many students were kept alive by your contributions: Karin Nyhus, Ally Jacobs, Brenda Nelson, Melissa Pettyjohn, Olivia Newfield, Millie Reid Rivera, Jenny Halverson, June D'Zurilla, Susan DesLauriers, Misha Jameson, Christine Doboszenski, Erin Howlett, Sarah Herschbach, Lisa Griebel, Amy Elskamp, Mee Xiong, Jill Hallonquist, Justina Pince, Tina Turnage, Andrew Hart, Tracie Killion, Charlene Molina, Julie Vanasse, Mie Lynch, Sue De Leon and Serah Morrissey.

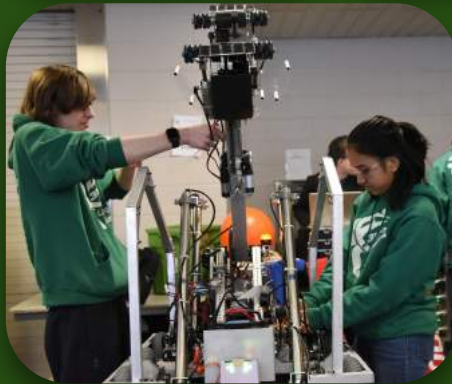
We would also like to thank Ecolab for the tour back in October. It would not have been possible for us to reach this point of completion without all your generosity and dedication to our robotics program!

COMPETITION SEASON

Week Zero Competition

Week Zero is the last Saturday before the end of build season. It's a chance to take your nearly complete robot out for a spin.

We had our share of small and large system issues and failures, but managed to come up with quick solutions and had several great runs against other teams at Eagan HS.



Duluth Northern Lights Regional



March 7 - 9



On Thursday March 7th, we're packing up and heading up to Duluth for the Northern Lights Regional competition at the DECC! For 3 days, we'll compete against 50+ other teams. Thursday is the practice day and on Friday the real competition starts. Qualifying matches end

on Saturday, and if we do well, we can work our way up to quarter-finals, then semi-finals, and finally, well, finals! If we perform well enough in finals we'll have the honor of going to World Championships in Detroit!

MENTOR APPRECIATION!

Charles Nepomuceno

Lead Engineering Mentor



Charles leads our team with enthusiasm (it's infectious), positivity and deep FRC knowledge and pushes us to strive to do better than we ever thought we could. He's a great advocate for student ideas, always encouraging open discussion of new ideas.

He's only been with us for 2 years -- on top of his 12 years of experience with FRC teams in Indiana -- but has transformed our team from one rarely selected by other alliances for playoffs, to a team alliance captain selecting other teams to join us in the quarterfinals.

Outside of his professional role as a mechanical engineer at Ecolab, Charles is also a volunteer official with the Minnesota FIRST Robotics organization - helping teams from all around the state succeed and competitions. We are proud to have him as a lead mentor!

Conor Smith

Lead Technical Mentor



Conor leads our Fabrication and Design team with energy, optimism, and understanding. Always available and eager to help students learn, he pushes our members to do their best and encourages them to learn new skills.

He has been with us for 2 years and our fabrication team has taken off with him. He has helped so many students improve their skills in fabrication, engineering and design by emboldening them to come up with their own solutions and think outside the box.

Conor is a lead chemist at Ecolab, but we know his heart lies in building robots. His enthusiasm for robotic arts has definitely rubbed off on each of our members.

MENTOR APPRECIATION!

Dan Halsey

Lead Non-Technical Mentor



Dan joined our team last year as our lead non-technical mentor - mainly to help students with communications, media, planning, fundraising and parent organizing. He joined our team with professional advertising, marketing, and media experience, and has since completely transformed the non-technical side of our team.

We now run our team less like a fun activity, and more like a small business thanks to his efforts. We also have dedicated business and media divisions where students are broadcasting to the community and our sponsors about all the great skills we are learning.

Dan is a Product Director at Best Buy and enjoys the challenges that have come with growing the team by 3x this year.

Doug Sisk

Lead Faculty Mentor



Doug has been our faculty mentor for five years and is a fantastic resource for the whole team. He has deep knowledge of engineering and is a master in the machine and wood shops we use throughout the season and the students love to interact with him.

While Doug mentors for the team, most of the team members know him as Mr. Sisk, as he teaches several courses at Henry Sibley related to Technical education - including PLTW, supermileage cars, metals, welding and even photography. He is also part of the Tri-District Transportation program, preparing students for STEM-based careers after high school.

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or contact Dan Halsey - Lead Mentor at halseyusa@gmail.com

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Visit our website at: www.team3100.com to find our complete calendar