

Executive Summary

Somewhat like the Engineering Design Process is cyclical, always improving, so is our club development. Our response to each competition season challenge builds on what we learned, and how we performed during the previous competition.

Since we start each year with FTC we can normally expect to advance only as far as state, as we integrate new members and relearn how to work well together on our 15-person team.

SkillsUSA mid-year limits us to 2-person teams, yet requires all of the performance of FTC and SeaPerch - allowing and requiring the small groups work in all aspects of a full size team. There are over 80 competitions sponsored by SkillsUSA that MechaMules could be “playing” in.

SeaPerch in the spring is where we demonstrate everything we have learned on all aspects of becoming professionals on 8-person teams, and how far we have grown from the previous season.

Throughout the school year we give back to the community by providing demonstrations and presentations, by mentoring in classrooms and other teams, and by taking on community service projects. Email us for more info, at:

info@mechamules.com

Generic Calendar

- Begin FTC Teams - Sept.
- Begin Mentoring - Oct.
- T-shirt Fundraiser - Oct.
- FTC League 1 - Nov.
- Begin SkillsUSA - Nov.
- FTC League 2 - Dec.
- FTC Interleague - Dec.
- KM Cup (Fall) - Jan.
- SkillsUSA Regional - Jan.
- FTC State - Jan.
- Begin SeaPerch - Jan.
- SeaPerch Qualifier - March
- SkillsUSA State - April
- WWW - May
- Car Wash Fundraiser - May
- SeaPerch International - May
- KM Cup (Spring) - June
- Team Celebration - June
- SkillsUSA National - June
- Bald Eagle Days - July
- County Fair - August

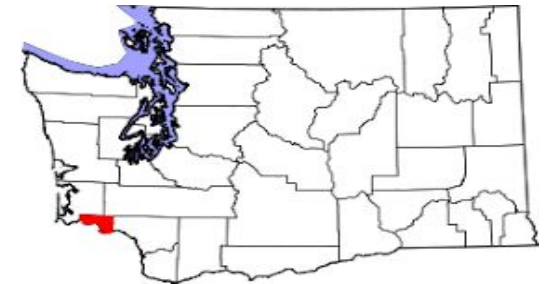
To Sponsor Our Club

We accept donations anytime and recognize our sponsors on our shirts, our banners, and promotions. Please contact us at our email address for more info, or make checks out to:

“Wahkiakum ASB” memo: MechaMules

Wahkiakum School District
500 South Third Street, PO Box 398
Cathlamet WA 98612.

Mecha Mules



Wahkiakum School District

Robotics and Engineering Club

Info@mechamules.com

360-795-3271

Update March 2023

Our Club Goal

Our goal is to become professional in everything we do: engineering design process, robot performance, presentations, documentation, communication, attitude, teamwork, mentoring. Where:

- Beginners hope to get lucky
- Amateurs practice until they get it right
- Professionals practice until they cannot get it wrong

We measure how we are doing on our goal by how we do in competitions with other teams, and community support and feedback.

Volunteering

All of our competitions involve electrical and mechanical engineering, computer programming, presentation and writing skills, budgeting and funding, teamwork and leadership. If you have a skill in any of these areas and want to make a difference in young people's lives, please contact us to help mentor:

info@mechamules.com

Our Club and Teams

Our Club sponsors several Teams, each with its own team leaders, season, and challenges and activities:

FTC (FIRST Tech Challenge) - Robots compete in teams in a 12' by 12' field to score more points than the opposing teams. September - January

SkillsUSA - Over 80 different 2-person events with a broad array of challenges. November - April

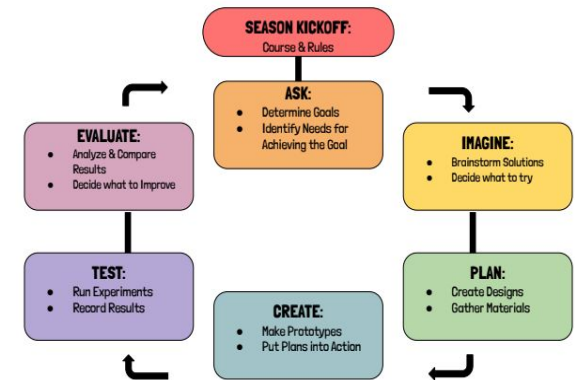
SeaPerch - Underwater robots compete to post best times on a speed course and most points on a mission salvage course. December - May

Mentoring - We mentor in MS and elementary school classrooms, support new and younger teams, and coordinate the Wahkiakum Wohbot Wohundup for K-5, and the KM Cup for Middle School. September - June

Outreach - We give robot demonstrations, host fundraisers, give presentations, and work on community projects. September - August

We accept new club members anytime, email us to find out how:

info@mechamules.com



Our **Engineering Design Process** follows the model as given in the diagram.

Once we are given the challenge, and the due date, we divide that time in half. We decide and assign different parts of our plan to sub-teams. By the end of the first half we have a working model made up from the best parts from each sub-team's efforts. We then use the second half to refine and perfect that model, and to practice.

Along the way each sub-team documents in words, photos and sketches its decisions on keeping or rejecting a given solution.

Unlike School Sports, in robotics there are no divisions based on school size. We are in it at the same level with every other club and school in the state.