

FIRST ROBOTICS COMPETITION
TEAM 3482 - ARROWBOTICS
TEAM 3482 HANDBOOK



TEAM 3482: ARROWBOTICS

WESTMONT HIGH SCHOOL

TEAM HANDBOOK





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Team Introduction

Congratulations on deciding to join Team 3482! Also known as Arrowbotics, we are a diverse group of students who have a passion for the world of robotics. Founded in 2010 by a group of like-minded seniors, Westmont's Arrowbotics has grown in size and skill. Whether it's engineering or design, our members are dedicated to making the best robot possible to send to various competitions throughout the season. Our team is entirely student lead and with help from mentors, parents, and sponsors we aim to create an exceptional opportunity to create, build and learn.

Just as all of a robot's parts work toward a common, functional goal, members of our team have shared goals as well. Knowledge of the information in the handbook will enable our team to work as a unit.

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Build Season

During the intense competition season in January and February, a demanding schedule of six days a week can be typical. Build hours are determined by the availability of mentors and students. Team members prepare for this time commitment by using time wisely, focusing on their grades as well as team goals, and planning ahead. Parents share in the commitment by providing snacks, transportation, and expertise.

Build Schedule

Our main build season starts the first Saturday of January. We build every day for six weeks, ending in mid-February. Dedication to the team is expected, although we understand that not everyone will be able to make it to every build day. If you have any schedule conflicts, please talk to Kelly or Yunus.

Monday - Friday
After School - 6:00 pm

Saturday & Sunday
10:00 am - 5:00 pm

Competitions

FIRST, which stands for "For Inspiration and Recognition of Science and Technology," is a nonprofit organization founded by Dean Kamen in 1989. The FIRST Robotics Competition (FRC) combines elements of sports and engineering. This unique partnership between industry and academia, results in an environment that fosters a deeper appreciation for the areas of STEM — science, technology, engineering, and mathematics. Students work side by side with professionals to gain field experience and knowledge. Each year, the tournament revolves around a topic, whether it be stacking boxes or launching frisbees. Teams from around the world compete to accomplish certain tasks within a set time frame.



Non-Build Season

Outreach

Whether it's partnering with other *FIRST* Robotics teams, introducing robotics to other schools and students, or making presentations to the community-at-large, Outreach is a vital component of team 3482. After the busy six-week build, Arrowbotics participates in numerous local events. We believe more people should have the opportunity to engage in the fields of science and technology.

Fundraising

Team members take an active role in funding the team. Tools, equipment, events, and travel are central elements of participation, for which Westmont High School provides a small percentage of funding, as well as a classroom from which to operate. While the Finance Sub-team organizes events, all members participate in obtaining financial support for our goals. During the non-build months, students work within the community to apply for team sponsorships and grants.

Training

Outside of January and February, students work on many aspects of skill-building. Members are encouraged to participate in robotics workshops which can strengthen knowledge and interests. Strong summer and fall preparation makes for less stress during the competition.



Team Structure

Mechanical

In charge of the fabrication and assembly of the robot during build phase.

Electrical

Coordinates the wiring of the robot: all power and communication systems.

Software

Directs programming of the robot for autonomous and teleoperated modes.

Marketing

In charge of designing team shirts, flyers, banners, and other merchandise.

Public Relations

Manages connections with sponsors and staff.

Finance

Regulates team funds.

Fundraising

In charge of corporate grant applications and other fundraising activities.

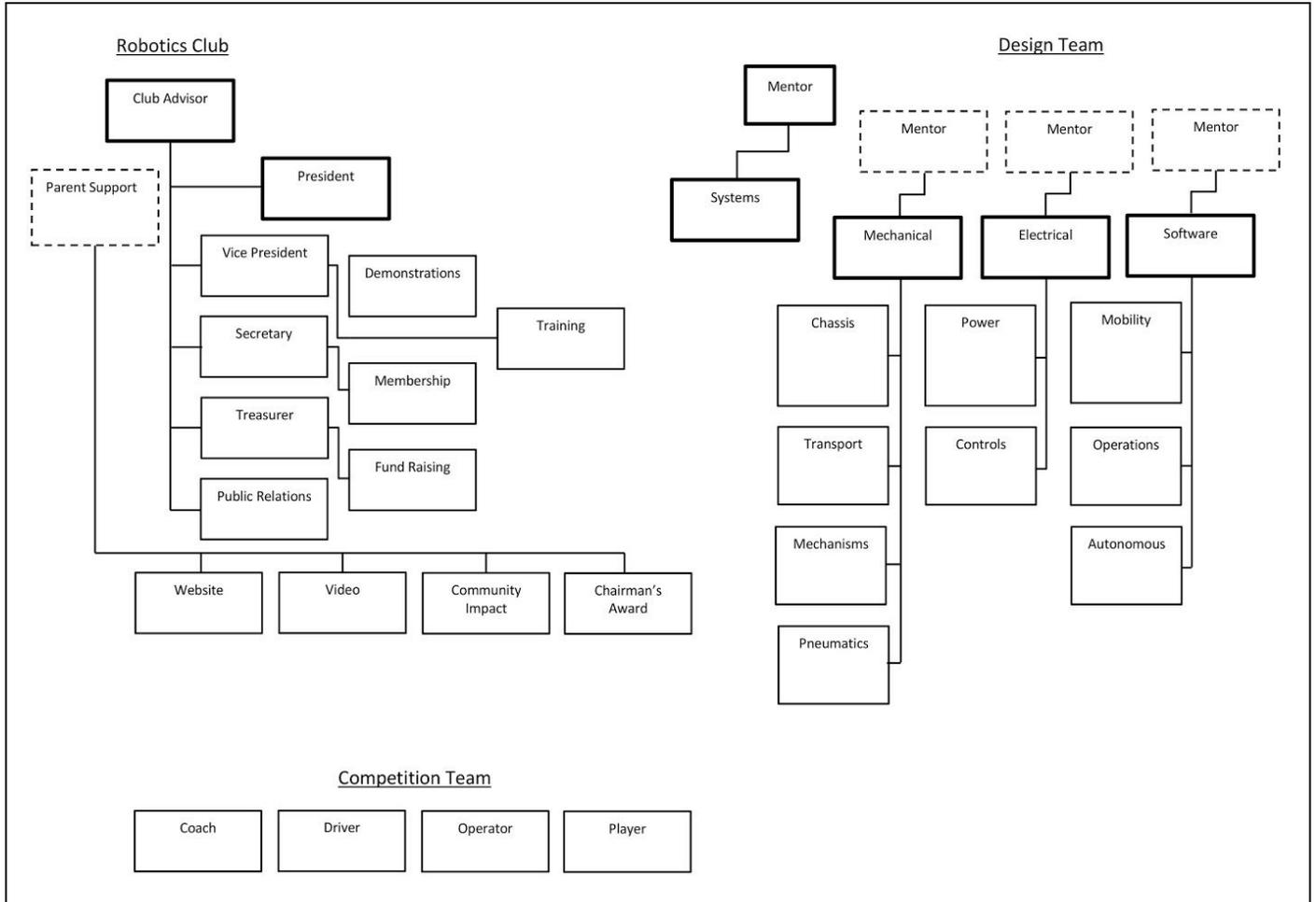
Web Management

Maintains an easy-to-use and up to date team website.

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Communication

For the 2017-2018 school year, we will be using Google Groups as our main communication platform.

- Search for “Westmont Robotics” in Google Groups
- Click on our group
- Click on “Join Group”
- A request will be sent to Kelly for approval

If your join request is not accepted within 48 hours, or if you are unable to send a request:

- Email “zhhkelly@gmail.com”
- The email’s subject should be “Google Group Join Request”
- The email’s body should include your name and grade

We also use Remind to send out texts for last minute info and schedule changes:

- Text @westmonta to 81010

Every team member can also sign up for an account at team3482.com.

How To Register for an Arrowbotics Account:

- Go to Team3482.com
- Click ‘Register’, found in the upper left-hand corner.
- Fill out personal information and complete sign-up
- Go to Social>Groups
- Request membership for the group Team 3482

Inappropriate usage of forums, chats, or any other aspects of the team communication systems can lead to revoked privileges.



General Behavior Rules

Unlike most Varsity activities at Westmont High School, Team 3482 has no tryouts or entrance requirements. Arrowbotics is an open group, welcoming all who wish to participate. The wide variety of experiences and opportunities offers each student the chance to find his or her niche.

While there are no prerequisites for joining the team, Team 3482 has standards of participation and behavior that are necessary for the success of each member and for the team as a whole. Meeting these standards provides individuals the opportunity for the privileges of leadership positions and travel opportunities.

Members must maintain academic eligibility as per school policy.

Westmont High School rules require that all team members maintain good academic standing. During the build season in January and February, members must maintain a minimum average of 70 in each class. Any student whose average drops below this minimum may lose eligibility to be on the team.

Members attend meetings during non-build season whenever possible, a majority of the build sessions during build season, and team functions as necessary. Team 3482 participates in skill development programs and outreach events throughout the year. With the understanding that students often have varied interests and commitments, team members should stay informed of team events and participate as much as possible. Establishing a record of dependability and punctuality is essential for team organization and efficiency.

Parents of members are encouraged to participate actively in team activities and help in team operations.

Without the participation of generous and experienced team parents, members are well aware that opportunities would be very limited. Appreciation and respect for these volunteers is central to Team 3482.

All members must comply with machinery rules.

Before using any power tools (drills, saws, grinders, etc.), new members must go through a safety orientation with a team veteran. This will help prevent accidents to individuals, equipment, and facilities.

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Members Must Demonstrate Appropriate Character/Behavior.

All members of Team 3482 rely on each other for the success of the group.

Everyone is expected to bring the best of his or her abilities to the group. The competitions are mentally and physically demanding, time consuming and expensive; all involved should behave as motivated young adults with integrity and the greatest regard for others. Members should demonstrate the following attributes:

- Good Judgement and Positive Behavior
- Honesty
- Commitment to a Project
- Ability to Work Both Independently and as a Part of the Team
- Respect for Facilities, Equipment, and Other Students
- Appropriate Focus

Unacceptable Choices

These Following Actions Will Lead to Expulsion From the Team.

- Destroying property with malicious intent
- Embezzlement of team funds
- Stealing
- Misuse of tools
- Any other behavior not in line with school and/or FIRST regulations



Board Structure

Club Advisors

Mr. Garcia
Mr. Coonce

Mentors

Mr. Rock
Mrs. Rock
Sarah Rock
Mr. Allawi
Haider Allawi
Mr. Saran
Mr. So

Board Members

Co-Presidents:	Kelly Zhang and Yunus Chang
Vice President:	Ryan Cheng
Director of Engineering:	Bjorn Johnson
Head of Mechanical:	Varun Saran
Heads of Programming:	Nick Arenberg and Jared Levy
Head of CAD:	Michael Makhota
Head of Electrical:	TBD
Finance Director:	Mohsin Sawari
Head of Fundraising:	Ashwini Joshi
Public Relations Directors:	Betty Zhong
Head of Communications:	Jessica Jia Xu
Media Master:	Oscar Waterman



Contract

I have read the handbook of Team 3482 Arrowbotics and I agree to comply with the policies outlined within.

Student Name

Student Signature

Date

Check to Authorize:

- Team 3482 Arrowbotics is allowed to use pictures and digital recordings of this student for educational purposes.
- This student is allowed to carpool with mentors and other team parents.

Parent/Guardian Name

Parent/Guardian Signature

Date