2015-16 Team Leadership Roles and Responsibilities

Team Captain

- Interact with mentors and faculty advisor daily. Understand mentor direction and translate to the students
- Overall coordination and communication across all the captains (including business and outreach). You are leading the **captains**, not their teams
- Ensures all members of the team are engaged in meaningful roles
- Make sure an overall SCHEDULE is understood and all milestones are achieved by working with the various teams
- Main POC for communicating team issues, concerns, ideas to the mentors
- Lead daily standups during build season
- Coordinate and resolve issues between Strategy, Integration and Hardware leads
- Bring inter--student or inter--mentor disagreements to the attention of the faculty advisor for resolution

Game Captain

- Beginning of Build Season
  - Coordinate with Captains and Strategy Team to translate rules into design requirements
  - Set team strategy for scoring (and platform attributes) based on game rules and our scoring strategy
  - Know things: (Know these at competitions too)
    - Know the Rules
    - Know the competition: venue, game dynamic, judges and referees
    - Know the Opponents: other teams, other designs
- During Build Season
  - Train the drive team on our likely strategies. Run driving drills designed to simulate game--time situations.
  - Work with mentors and faculty advisor to determine the best drive team for executing competition strategy
  - Interact with other captains (constantly)
  - Communicate with adults
  - Coordinate system design goals/issues/details ○ Interact with strategy and outreach teams (daily) ○ Understand needs/goals/status of both teams ○ Coach, inspire,

communicate w/ each team *daily*
- o Make a weekly plan *with* Strategy and Outreach "groups"
- o Backstop your team leads
- During Competitions
  - o At competitions ensure that our entire team understands game strategy, especially when we make adjustments during the regional. This is critically important once we are selected for an alliance as our strategy may change significantly
  - o Execute scouting strategy at the game
  - o Lead debriefs after each match during the competition
  - o Build relationships with other teams at competitions to build potential alliance relationships

Operations Captain

- Define, prioritize, and oversee execution of team marketing, business and outreach activities (all non-robot building activities). These include:
  - o Team Media presence: Website content, YouTube, Facebook, newsletters
  - o Fundraising, sponsor contact (former, existing, new) and relationships
  - o Outreach activities- STEM Fairs, other FIRST teams, etc
  - o Awards writeups
  - o Marketing and Promotional items
  - o Team branding standards
- Ensure that entire team understands these activities, knows who sponsors are, knows teams that we mentor, etc.
- Work closely with mentors and Tech Boosters to determine student roles and responsibilities and Boosters/parent roles and responsibilities in these areas. Actual activities dependent on this Division of Effort and staffing levels of overall Operations team. Keep the communication going to ensure nothing is dropped.
- Work with subteam leads to identify each subteam's tasks, schedules, milestones, deadlines and priorities
- Create an overall schedule for all activities and ensure milestones and deadlines are met.
- Support subteam leads as needed to ensure staffing levels are appropriate, all actions are tasked, and deadlines are met
- Coordinate across subteams to address cross-subteam integration needed
- Oversee authoring of team submissions for awards (Chairman's, etc.)
- Train and staff ambassadors for competitions
- Coordinate with other captains on overall team staffing, training, planning
- Manage Team Facebook page to include monitoring content and page membership (inviting members to join, approving requests to join, etc.) in a timely manner.
- Provide logistical support to team admin/Tech Boosters as requested.
- Backstop subteam leads

Integration Captain

- Implement risk matrix and mitigation strategy for software and electrical
- Ensure close coordination between electrical and software teams
- Work with hardware captain to determine required number of sensors, positions, states, etc.
- Educate hardware captain and mechanism leads on how to produce electrical and software requirements specifications for their respective areas
- In coordination with the Hardware Captain, run the initial integration and overall platform design meetings.
- Create pit area checklists for electrical, software and drive station.
- Interact with other captains (constantly)
- Coordinate system design goals/issues/detail
- Interact with electrical and software teams (daily)
- Understand needs/goals/status of both teams
- Coach, inspire, communicate w/ each team _daily_
- Communicate with adults
- Know things:
    - where things are, who's doing what, why they are doing it, what needs to happen next
    - Make a weekly plan for integration "group" that aligns with the master schedule
- Backstop your team leads
- Provide **realistic** estimates of schedule/milestone completion for the electrical and software teams to other teams

Hardware Captain

- Implement risk matrix and mitigation strategy for mechanical and drive components
- In coordination with the Integration Captain, run the initial integration and overall platform design meetings
- Determine hardware requirements for sensors, software, etc.
- Create pit area checklists for all mechanical components
- Interact with other captains (constantly)
- Coordinate system design goals/issues/details
- Interact with mechanism teams (daily)
- Understand needs/goals/status mechanism teams
- Coach, inspire, communicate w/ mechanism teams _daily_
- Communicate with adults

- Know things:
    - where things are, who's doing what, why they are doing it, what needs to happen next
    - Make a weekly plan for hardware "group" that aligns with the master schedule
    - Resolve issues between mechanical groups (e.g., room on the platform, etc)
- Backstop your team leads
- Provide **realistic** estimates of schedule/milestone completion for the mechanical/drive teams to other teams
- Coordinate the pit area during competitions

Strategy Lead

- Prior to build season scout out teams that we will be facing in our respective regional competitions and build a dossier on each team. This dossier should include any past wins, strategies, history of teaming with RAID, etc. Update these dossiers during the build season based on open source information found on team sites, youtube, etc.
- Shred game rules and devise compliance matrix
- Devise our intended "scoring" strategy
- Validate all designs (software, hardware) against game strategy

Mechanism Lead (3 positions**), Electrical Lead, Software Lead**, **Drive Train Lead**, Sensor Lead, Practice Field Lead

- For your respective area, create a design that is compliant with our game strategy and overall platform design
- Ensure your team understands their assignments and have meaningful work to perform AT ALL TIMES
- Devise a strategy for mentoring newer team members
- Meet & beat schedules
- Interact with other team leads to better understand progress, strategy and design
- Keep track of team members participation

Outreach Lead

- Identify elementary and middle school teams that we can mentor.
- Coordinate team mentoring of elementary and middle school teams.
- Work with mentors to coordinate team participation in community outreach events (e.g.STEM Fairs, Girl Power, Homecoming Parade, etc.)
- Plan and organize student and robot participation in external activities as needed

- Expand the FIRST culture across AHS- link with other student clubs, etc to bring special expertise (video, photography, graphics, business) expertise into the team.
- Draft Chairman's award input - work with other Operations subteam leads to produce video
- Define and track schedules, milestones, deadlines of all activities and ensure these are met.

Marketing Lead

- Define content for team website and work with software team to keep website updated
- Work with Tech Boosters and parent volunteers to plan graphics, buttons, shirts, promotional materials etc.
- Oversee the creation of team marketing materials- newsletters, videos, etc. Define content, task out articles, help write scripts,, put together finished product
- Define and track schedules, milestones, deadlines of all activities and ensure these are met.

Business Lead

- Work with the mentors and Tech Boosters to help plan and execute a strategy for team fundraising.
- Categorize team budget for grants and award purposes
- Represent funding needs to potential sponsors
- Identify potential grant opportunities, support drafting of grants
- Reach out to former, current and potential new sponsors for additional team support
- Communicate with sponsors regularly to keep them informed of team activities
- Draft/Update Business Plan and Entreprenuership Award Writeup
- Define and track schedules, milestones, deadlines of all activities and ensure these are met.

CAD Lead

- Provide CAD designs that assist the mechanical leads in designing their components
- Manufacture "rapid prototyping parts" as required
- Develop drawings of key features to explain the robot to judges at competition

Senior Mechanical Lead

- Interface with Hardware Captain, sub--team leads, and mentors
- Support all mechanical teams as required or directed
- Provide guidance and mentorship to less experienced sub--team leads

- Be responsible for:
  - Special projects
  - Critical parts
  - Rapid prototypes
- Be able to work independently while meeting deadlines
- Significant time requirement for this position