

Region: Oklahoma

Period 1 – Project Plan

Goals and Tasks for Botball 2019

#### Game Goals and Tasks

1. Plan strategies – 1/14 & 1/17
  - a. List of ideas 1/14
  - b. Map the robots' path 1/17
  - c. Drawing design sketches 1/24
2. Review the rules – 1/17 & 1/24
  - a. Read the frequently asked questions – 1/17 & 1/24
  - b. Read and discuss the rules – 1/14 & 1/24
3. Assign jobs – 1/24
  - a. Programmers – 1/17
  - b. Engineers – 1/17
  - c. Documentary team – 1/17
  - d. Equipment team – 1/17
  - e. Team managers -- 1/17
4. Build Practice Board – 1/17 & 1/24
  - a. Adult volunteers will complete all board assembly tasks

#### Robot Building Goals and Tasks

1. Design the Robot – 1/24
  - a. Create drawing of Lego robot – 1/24
  - b. Create drawing of create robot – 1/24
2. Build the Create robot – 2/7
  - a. Build a base – 2/7
  - b. Put camera on it – 2/7
3. Build the Lego robot – 2/4 & 2/7
  - a. Build a claw/grabber for firefighters – 2/4
  - b. Add extender for power lines – 2/7

#### Programming Goals and Tasks – 2/4

1. Program Create bot – 1/28 - 2/7
  - a. Create programming plan (Pseudocode) – 1/28
  - b. Program driving – 1/31
  - c. Program sensors – 2/4
  - d. Program servos – 2/7

2. Program Lego bot – 1/28 – 2/7
  - a. Create programming plan (Pseudocode) – 1/28
  - b. Program driving – 1/31
  - c. Program claw – 2/4
3. Test Programs
  - a. Test bots driving at the same time – 2/7 & 2/11
  - b. Test positioning of bots on the table – 2/7 & 2/11
  - c. Test light sensor and shut down code – 2/7 & 2/11
  - d. Test camera & bump sensors – 2/14

#### Documentation Goals and Tasks – 1/17

1. Complete first documentation – 1/28
  - a. Assign who is documenting, building, programming, and presenting – 1/21
  - b. Get information from building and programming groups to organize goals and tasks for practices. – 1/24
  - c. Record information in document – 1/21
2. Complete second documentation – 2/20
  - a. Collect information from build team and photograph bots – 2/7
  - b. Collect information from coding team, including samples of code – 2/7
  - c. Record information in document – 2/14
3. Complete third documentation – 3/6
  - a. Have everyone take survey on computer – 3/4
  - b. Get information from people on team for lessons that they have learned – 3/4
  - c. Record information in document – 3/4

#### Schedule Conflicts

1. Heidi misses days sometimes because of family situations or sickness.
2. One coach occasionally works on Thursday evenings

#### Team Organization

#### Practice Times

1. Practices are Mondays and Thursdays (adding Fridays in March)
2. Every practice is from 3:00-5:30.

#### Practice Dates

January – 17, 24, 28, and 31

February – 4, 7, 11, 14, 21, 25, and 28

March – 4, 7, 8, 9 (competition)

#### Jobs for groups for Create and Lego

Team Leaders – Reese, Paizley

Building group for Create – Heidi, Rashaud, Gabriel

Building group for Lego – Francisco, Brandy, Connor

Programming group for Create – Aidan, Maya

Programming group for Lego – Reese, Paizley

Documentation – Rashaud, Paizley, Miya

Equipment Team – Heidi, Brandy

#### Solving Problems

1. If two or more team members are having a conflict, they will try to work the problem out on their own. They will take turns expressing their opinions and thoughts and try to come up with a resolution.
2. If resolution is not established, they will take the problem to the student team leader.
3. If resolution is still not established or if the conflict involves the student team leader, the problem will be brought to the teachers in charge, who will decide either to resolve the problem or bring it to the team and have a team conversation or vote. Teachers' decisions or votes will be the resolution to the conflict.