

Region: Oklahoma

## Period 1 – Project Plan

### Goals and Tasks for Botball 2019

#### Game Goals and Tasks

1. Plan strategies – 1/17
  - a. List of ideas 1/17
  - b. Map the robots' path 1/17
  - c. Drawing design sketches 1/17
2. Review the rules – 1/17 & 1/24
  - a. Read the frequently asked questions – 1/17 & 1/24
  - b. Read and discuss the rules – 1/17 & 1/24
3. Assign jobs – 1/17
  - 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 – 1/17 & 1/24
  - a. Create drawing of Lego robot – 1/17
  - b. Create drawing of create robot – 1/24
2. Build the Lego robot – 1/28 & 1/31
  - a. Build platform – 1/28
  - b. Attach platform – 1/28
  - c. Build claw – 1/31
  - d. Attach claw – 1/31
  - e. Attach sensors – 1/31
3. Build the Create robot – 1/28
  - a. Build arm – 1/28
  - b. Attach arm – 1/28
  - c. Attach sensors – 1/31

#### Programming Goals and Tasks – 1/28

1. Program Create bot – 1/28 – 2/7
  - a. Create Pseudo code – 1/24
  - b. Program driving – 1/28 & 1/31
  - c. Program sensors – 1/31 & 2/4

- d. Program servos – 2/4 & 2/7
- 2. Program Lego bot – 1/28 – 2/7
  - a. Create pseudo code – 1/24
  - b. Program driving – 1/28 & 1/31
  - c. Program sensors – 1/31 & 2/4
  - d. Program servos – 2/4 & 2/7
- 3. Test Programs
  - a. Test bots driving at the same time – 2/11
  - b. Test positioning of bots on the table – 2/11
  - c. Test light sensor and shut down code – 2/11
  - d. Test camera & bump sensors – 2/14

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

- 1. Complete first documentation – 1/17
  - a. Assign who is documenting, building, programming, and presenting – 1/17
  - b. Get information from building and programming groups to organize goals and tasks for practices. – 1/17
  - c. Record information in document – 1/17
- 2. Complete second documentation – 2/20
  - a. Collect information from build team and photograph bots – 2/18
  - b. Collect information from coding team, including samples of code – 2/14
  - 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. Shelby is late because sister does not get off school until 3:30pm.
- 2. One coach occasionally works on Thursday evenings.
- 3. Rocky has transportation issues on Thursday.

#### Team Organization

#### Practice Times

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

## Practice Dates

January – 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 Leader – Shelby

Building group for Create – Abby, Shelby and Kevin

Building group for Lego – Conner, Taylor, and Rocky

Programming group for Create –Ben, Gwyneth, and Shelby

Programming group for Lego –Julia, Taylor, and Kevin

Documentation – Shelby, Taylor, Gwyneth, & Peyton

Equipment Team – Conner & Abby

## 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.

