

**Southwest Covenant Schools: Iron Patriots**  
**Team 49 Period One - Project Plan**

**Goals and Tasks for Botball 2019**

***Games Goals and Tasks***

***Deadlines***

- |   |           |
|---|-----------|
| 1. Build game table                       | 1/26/2019 |
| a. Receive game table instructions        | 1/19/2019 |
| b. Build the game table                   | 1/26/2019 |
| c. Put the tape on the game table         | 1/26/2019 |
| 2. Get familiar with game rules and goals | 2/1/2019  |
| a. Know tie breakers                      | 2/1/2019  |
| b. Know names and values of game pieces   | 1/28/2019 |
| c. Know multipliers                       | 1/28/2019 |
| 3. Plan scoring ideas and strategies      | 2/1/2019  |
| a. Brainstorm best scoring ideas          | 1/28/2019 |
| b. Discuss the best scoring plans         | 1/28/2019 |
| c. Determine best scoring strategy        | 2/1/2019  |

***Robot Building Goals and Tasks***

***Deadlines***

- |   |           |
|---|-----------|
| 1. Build Lego Bot                                   | 2/7/2019  |
| a. Mount Wallaby                                    | 2/7/2019  |
| b. Build Mechanical Structure(s)                    | 2/7/2019  |
| c. Attach necessary sensors                         | 2/7/2019  |
| 2. Build Create                                     | 2/7/2019  |
| a. Mount Wallaby                                    | 2/7/2019  |
| b. Build Mechanical Structure(s)                    | 2/7/2019  |
| c. Attach necessary sensors                         | 2/7/2019  |
| 3. Finishing Touches                                | 2/14/2019 |
| a. Check for illegal parts                          | 2/14/2019 |
| b. Check number of parts used                       | 2/14/2019 |
| c. Create list of parts used on Create and Lego bot |           |

***Programming Goals and Tasks***

***Deadlines***

- |   |           |
|---|-----------|
| 1. Program the functions                | 2/19/2019 |
| a. Locate any KIPR program examples     | 2/15/2019 |
| b. Understand how the functions work    | 2/17/2019 |
| c. Implement program                    | 2/19/2019 |
| 2. Update functions library             | 2/18/2019 |
| a. Set standard variables and constants | 2/16/2019 |
| b. Add functions                        | 2/16/2019 |
| c. Test Programs                        | 2/17/2019 |

- |                      |           |
|----------------------|-----------|
| d. Share with class  | 2/17/2019 |
| 3. Be 95% consistent | 3/1/2019  |
| a. Program robot     | 2/28/2019 |
| b. Program comments  | 3/1/2019  |
| c. Test on board     | 3/1/2019  |

### ***Documentation Goals and Tasks***

### ***Deadlines***

- |  |           |
|--|-----------|
| 1. Turn in Period 1: Project Plan              | 1/28/2019 |
| a. Create a Plan                               | 1/23/2019 |
| b. Proofread                                   | 1/24/2019 |
| c. Turn in                                     | 1/28/2019 |
| 2. Turn in Period 2: Code & Mechanical Systems | 2/20/2019 |
| a. Consult Various Pods                        | 2/13/2019 |
| b. Proofread                                   | 2/18/2019 |
| c. Turn in                                     | 3/3/2019  |
| 3. Turn in Period 3: Lessons Learned           | 3/6/2019  |
| a. Consult Various Pods                        | 2/25/2019 |
| b. Proofread                                   | 3/4/2019  |
| c. Turn in                                     | 3/6/2019  |
| 4. Onsite Documentation                        | 2/25/2019 |
| a. Pictures                                    | 2/20/2019 |
| b. Write-ups                                   | 2/24/2019 |
| c. Completed                                   | 2/25/2019 |

### ***Schedule Conflicts***

### ***Deadlines***

- |   |             |
|---|-------------|
| 1. Rose Day (Jr's and Sr's)                     | 2/6/2019    |
| 2. Winter Break (All Students)                  | 2/8 - 2/12  |
| 3. Band Contest                                 | 3/4/2019    |
| 4. Choir Contest                                | 3/7/2019    |
| 5. Baseball games                               | 4/4 4/7 4/9 |
| 6. "The Lion, The Witch, and The Wardrobe" Play | 4/8 4/9     |

## **Team Organization**

### ***Schedule of Meeting Times***

1. During school, there is one Botball class that meets from 2:50-3:35
2. Class will meet twice a month, or on Tuesday once every other week from 3:00 - 3:35 for status meetings
3. If needed, there will be work days on Saturday to get extra work done for Regionals.

### ***Division of Labor***

The class will be divided into groups of 2 people called "pods".

These pods will each be competing to see which robots will go to regionals. The class will

discuss strategies and ideas for the game board and robots. Then the pods will each build a set of robots and work on documentation. These tasks will be divided between the 2 people in the group. When the set of robots is decided, then the other pods will focus on perfecting the documentation and the robots of the group that won.

In each pod, there will be a member that builds and programs the Lego robot, builds and programs the create, and both members will document the specifics of their respective robots. Each person will be responsible to know deadlines and ask questions.

### ***Conflict Resolution***

- 1 Disputing team members will try to settle differences between themselves. If it is members from different pods it will go straight to step 3.
- 2 If no resolution can be met between the two team members, then it will go to the other pods team members to resolve.
- 3 If it cannot be resolved by the above, then it will be brought to the teacher who will find the resolution.