

Hawaii

University Laboratory School
19-0629

Goals and Tasks for Botball 2019

Game Goals and Tasks

Review games rules document - February 14

Tasks/Deadlines:

1. Read game review document for homework/February 8
2. Come to practice with ideas/February 12
3. Assign team member roles/February 14

Brainstorm strategies - February 19

Tasks/Deadlines:

1. Split possible scoring opportunities into “easy” and “difficult” categories/February 19
2. Finalize two objectives and assign teams/February 19

Build practice board - March 8

Tasks/Deadlines:

1. Construct Game board/March 4
 2. Mark corresponding joints/March 6
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Robot Building Goals and Tasks

Prototype the LEGO Robots - February 22

Tasks/Deadlines:

1. All members complete a labeled drawing of the concept for the LEGO Robot/February 22
2. All members complete a labeled drawing of the concept for the CREATE/February 22
3. Discuss concepts for the robots and decide the best design/February 22

Complete construction of LEGO Robot - **March 8**

Tasks/Deadlines

1. Build Brain Cage/February 22
2. Construct chassis, attach wheels, and motors/March 1
3. Build the separate effectors (arm, ram/pusher)/March 8
4. Attach effectors/March 8

Complete construction of CREATE Robot - March 15

Tasks/Deadlines:

1. Build Brain Cage and metal frame/March 11
2. Build the separate effectors (arm, ram/pusher)/March 13
3. Attach effectors/March 15

Programming Goals and Tasks

Write the pseudocode and code for the program - March 8

Tasks/Deadlines:

1. Assign team members to each robot's coding/March 1
2. Write out each robot's task in words (the pseudocode)/March 8
3. Write out code for pseudo code code/March 8

Complete programming for all Robots - March 19

Tasks/Deadlines:

1. Program precise turns/March 13
2. Program and calibrate servo actions/March 13
3. Test all programming for all Robots on game board/March 19

Run test programs on game board - March 22

Tasks/Deadlines:

1. Program basic movements/March 22
2. Program precision turns/March 22
3. Edit programs/March 22
4. Program sensor(s)/March 22

Documentation Goals and Tasks

First period documentation complete - February 11

Tasks/Deadlines:

1. Read Documentation instructions/February 7
2. Final editing and PDF creation/February 12
3. Upload to BOPD/February 12

Study new documentation rubrics - February 15

Tasks/Deadlines:

1. Read and review documentation rubrics for Period 2, 3, and 4/February 15

2. Set up GitHub account/February 14

Second period documentation complete - March 13

Tasks/Deadlines:

1. Record the footage of the construction and testing of robots/March 1 - 8
2. Check that the repositories with multiple commits are in Github/March 5
3. Upload link to submission page/March 10
4. Final editing/March 11
5. Upload to BOPD/March 13

Third period documentation complete - April 10

Tasks/Deadlines:

1. Interview team members to get information needed/March 27
2. Check that one pull request has been made in the repository/April 1
3. Final editing and PDF creation/April 5
4. Upload to BOPD/April 9

Onsite Presentation complete - April 30

Tasks/Deadlines:

1. Documentation team assigns sections to team members/
 - Team Knowledge/April 5
 - Review of Project Iteration/April 5
 - Identification of Risk/April 5
 - Supporting Documentation/April 5
2. All members submit slides to the documentation team/April 19
3. Finalize slides and memorize lines/April 26
4. Practice presentation to team/April 29

Schedule Conflicts

Major School Events/Holidays

Dates

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| ● Teacher In-Service Day (no school) | February 8 |
| ● Regional Science Olympiad Tournament (same coach and some students) | February 9 |
| ● State-Qualifying Debate Tournament | February 15-16 |
| ● O'ahu District Speech State-Qualifying Tournament | February 23 |
| ● Elementary Science Olympiad Tournament (same coach) | March 2 |
| ● 3rd Qtr Ends | March 8 |
| ● SAT Testing | March 9 |
| ● National Qualifying Congressional Debate Tournament (at ULS) | March 16 |

Hawaii

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| ● Spring Break | March 18-22 |
| ● 'Iolani Hands-On Spring Invitational | March 23 |
| ● Kuhio Day (Holiday) | March 26 |
| ● Choir Concert (tentative) | April 2 |
| ● Hawaii State Science and Engineering Fair (coach and some students) | April 8-10 |
| ● State Forensic Championship Speech and Debate Tournament | April 11-13 |
| ● ULS Fun Run and 'Ohana Day (all day) | April 12 |
| ● ACT Testing | April 13 |
| ● SBAC Testing for Grades 6 & 7 | April 15-16 |
| ● Good Friday (Holiday) | April 19 |
| ● SBAC Testing for Grades 8 & 11 | April 22-23 |
| ● Spring Banquet | April 27 |
| ● Booster Club Craft Fair | April 28 |

Team Organization

Regional Workshop: February 2-3

Team practice schedule

- Team practices will be held:
 - Middle School lunch
 - Mondays, Wednesdays, Fridays 11:30 - 11:55 pm
 - High School lunch
 - Tuesdays, Thursdays, Fridays 12:20 - 12:45 pm
 - After school
 - Tuesdays and Thursdays 3:30 - 5:30 pm
 - Saturdays 10:00 am - 4:00 pm
 - February 23
 - March 9
 - April 13, 20 (or 19), 27 (or 28)
 - Holidays/Spring Break (March 16-24)
 - TBD

Regional Tournament - May 2 at Hawaii STEM Conference (all day)

Division of Labor

Adult team leader: Ms. Seki-Wong

Middle School

- **Student Team Leader:** Ethan Chiu

Hawaii

- Robot building and programming Team: Ethan Chiu, Aiden Alamani, Liliana Dutcher, Matthias Kagawa, Nathan Li
- Documentation Team: Liliana Dutcher, Matthias Kagawa

High School

- **Student Team Leader:** Amos Lam
- Robot building and programming Team: Joshua Ancheta, Kealoha Hankins, Alyssa Guillermo, Benjamin Li, Pieter Nauwelaerts, Matthew Tolete, Maileen Cardenas
- Documentation Team: Alyssia Chen, Alexandra Jaeger, Rana Mejes, Alisha Nijjar

Conflict Resolution

The team has agreed that if disagreements occur we will handle them in the following ways:

1. Team members who disagree will first attempt to work out the disagreement together. Team members agree to allow everyone to express their opinions and thoughts one at a time and attempt to reach a resolution.
2. If a resolution cannot be reached, the team members will bring their problem to Ethan and Amos, the student team leaders. If a resolution is still not reached (or if the disagreement involves the student team leader[s]), it will be brought to Ms. Seki-Wong, the adult team leader. Ms. Seki-Wong will either decide how to resolve the conflict or will bring it to the team for discussion and end it with a team vote. Adult team leader's decision or the team vote will be final.