

Judo Bot Rumble

Schedule

Time	Event
10:15 – 11:30 am	Judo Bot Construction
12:30 - 1:30 pm	Round Robin Play

Competition

1. This is a friendly competition!
2. **Judges have the final say in all situations.**
3. Each team will be given a Round Robin schedule/point tracking sheet which includes the name of your team member who is rumbling, the opponent whom you are rumbling, and the table number (rumble arena) where you are to report.
4. Your team will play every team once; points are awarded at the conclusion of each round (see the chart below).
5. EACH TEAM MEMBER MUST TAKE A TURN TO RUMBLE at the conclusion of each round (NOT during the round in process).
6. Judo Bots begin by squarely facing each other with the front of the base touching the inside edge of the square and the arm completely extended.
7. Each round will start at the sound of a bell/whistle; you have TWO MINUTES to rumble.
8. Play will conclude at either the sound of a bell/whistle or if a Judo Bot is knocked over, knocked off the table, or knocked completely out of the blue arena; judges will award points according to the points chart below.
9. At the conclusion of each round, take your point tracking sheet to the main judging table to report your score. **Scores not reported promptly will result in a ZERO for that round!**
10. Once your point tracking sheet has been completed by the judge, you will have ONE MINUTE to move to your next table (rumble arena).
11. Points will be tallied to determine the first, second, and third place winners. In the event of a tie, the winner will be determined by a final rumble between the two tying teams.

Number of Points EARNED	
5	Knock opponent off the table; opponent has a hydraulic failure; opponent does not show up for the competition (play will cease)
4	Knock opponent over (play will cease)
3	Knock opponent completely off the blue square but not knocked over (play will cease)
2	If timer goes off, whomever has their opponent out of their square the most
1	Stalemate/Draw (both teams will get one point)
0	Not showing up for the competition, hydraulic failure, getting knocked off the table, getting knocked over, getting knocked off blue square
Number of Points DEDUCTED	
-3	Not using hydraulics to command the Judo Bot (touching it with hands or pulling on tubes)
-2	Showing up late to the competition (after the sound of the bell/whistle)
-1	Size limit infraction
DQ	Adding additional weight to any part of the Judo Bot with tape rolls and/or glue sticks

Judo Bot Building Tips and Regulations

1. Judo Bots should be assembled in four stages:
 - ✓ Base
 - ✓ Stand
 - ✓ Arm
 - ✓ Hydraulic system
2. Your building kit has everything you need to construct the Judo Bot; you will not be given any additional items, so plan accordingly. **THIS INCLUDES THE ONE METER OF TAPE!**
3. Before building, sketch out a few designs taking the following into consideration:
 - ✓ How can you design your Judo Bot to make it difficult for other teams to push and/or flip it over?
4. The Judo Bot base must fit within the 10" x 10" square (rumble arena)
5. The arm length cannot exceed 20 inches.
6. Follow these directions to build the hydraulic system:
 - ✓ Connect tubing to one syringe.
 - ✓ Fill completely with water.
 - ✓ Point the tip of the syringe up and push on the plunger. This expels all the air and fills the tubing with water.
 - ✓ Refill halfway with water and set aside.
 - ✓ Submerge the tip of the second syringe and repeatedly pump the plunger to expel air; fill halfway.
 - ✓ Connect the syringes and try it out. If the total amount of water in either syringe exceeds the 10 ml mark, then there is too much water in the system. There should be little to no air bubbles.
 - ✓ Glue on a holed cube to the end of one plunger in each set.
7. Each team member should practice working the hydraulic system.
8. You **CANNOT** add additional weight to any part of the Judo Bot such as glue sticks and/or masking tape rolls. This will be an automatic disqualification.

