**I. Vehicles**

1. The vehicle weight may not exceed 12 lbs.
2. The vehicle size may not exceed 18” by 18” by 6”.
3. Battery voltage may not exceed 18 volts DC at the drives.
	* No internal combustion engines will be allowed.
	* All power sources must be 100% contained in the vehicle and packaged appropriately for the expected abuse.
4. Vehicles may be powered by no more than 6 drive wheels.
	* Wheel diameter may not exceed 5” width not exceed 2”
	* Wheels may be purchased or made from scratch.
5. All vehicles at the beginning of each combat round must be capable of moving from the starting box within 15 seconds. Vehicles not capable of movement will be considered as a loss.
6. No vehicle may, under any circumstances, present a hazard to the judges, spectators, or the opposing operator(s).
	* No vehicle may in its operation cause damage to anything other than the opposing robot.
	* Any vehicle that imperils the viewing area will be ruled ineligible for competition.
7. All entries must conform to the general rules of the facility and the event.
8. All vehicles will be subject to a technical inspection prior to combat.
	* Judges may restrict any function deemed excessively hazardous.
	* All units must able to be opened for internal inspection.
	* The top 3 placing vehicles will be required to submit for inspection immediately following the final round.
* Vehicles failing to submit for inspection will result in disqualification.
1. Liquids may not be used in combat situations.
2. Robots must be singular in form.
	* No secondary robots or self-propelled devices that detach themselves from the main robot will be allowed.
3. Slow spinners are allowed with an absolute maximum tip speed of 5 feet per second and may spin in any direction.
	* The tip speed in feet per second is calculated by this formula: Tip Speed = RPM x Diameter x .00436.
4. All robots must have a ***Master Kill Switch*** that deactivates the robot immediately.
	* This is for the safety of the audience and the other competitors.
5. No organic elements will be allowed in any robot. (For example, you can't put a four year old with a baseball bat on top of your bot.)
6. Radio controlled bots entered should be able to operate on at least two frequencies or have a digital transmitter capable of non-conflicting frequencies or an R/C tether combination to avoid radio frequency conflicts.
7. You are encouraged to decorate in any style of your choice.

**II. Combat**

1. The combat surface will be a minimum of an 8' by 8' square or equivalent size circle arena.
2. The combat volume is defined as the combat surface and the airspace above the arena.
3. Leaving the combat arena entirely will be considered as a loss.
4. No part of any operator's body may impinge on the combat arena during combat.
5. The use of projectile weapons is not allowed due to issues of audience safety.
6. The use of "entanglement" style devices is not allowed.
7. No flammable fuels, liquid, gaseous or solid, may be used in combat situations.
8. There is a three minute time limit for each combat round.
* If neither robot has achieved a victory condition within the time limit, the combat round is declared a draw and both robots must begin a new round.
* If three successive draws are declared, the audience will be polled to decide whether both robots are removed from competition, whether to continue the combat, or whether the judges shall decide which robot is the victor.
1. Jamming your opponent’s controller, either electronically or physically, is prohibited.

**III. Judges**

A. The judge(s) shall be impartial non-participants.

B. The judge(s) may declare a contest completed at any time.

C. Judges' decisions are final.

**IV. Competition**

1. The competition will be one-on-one double elimination.
2. Vehicles will start on opposite sides of the combat surface with the aft end of each robot even with the edge of the combat surface.
3. Contestants may only enter one robot per competition.
4. Robots must be ready when the combat begins. Combat will not be restarted due to mistakes, radio conflicts, or other setup problems. A brief pretest may be allowed by the judges.
5. Stage hazards, such as steel bars or stuffed animals, may be introduced to the combat surface at the discretion of the judges and/or organizers.
6. For sumo events, a minimum of 10' (ten feet) distance must be maintained between the edge of the combat stage and the audience, for safety reasons. No audience members are allowed within the safety zone.

**V. Victory Conditions**

A. To claim victory your vehicle must show mobility and be within the combat volume. You will immediately be declared defeated if your vehicle has been rendered immobile, has entirely left the combat arena, or has come in contact with any restricted surface.

B. If both vehicles are immobile, the robot controlling mobility shall be required to release the other robot after a period of no more than ten seconds has elapsed. In cases where neither robot controls mobility, both vehicles shall receive a draw.

C. Immobility is defined as the inability to move at rate of at least one foot beyond the base radius of the robot in a reasonable amount of time.

D. No vehicle shall be required to compete within ten minutes of a previous combat. If a robot cannot be repaired within a reasonable time, a forfeit will be declared by the judge(s), solely at the judge(s) discretion.

E. A robot that sits more than fifteen seconds without attempting to engage the opponent will receive a warning from the judge(s) for "lack of aggression". Three warnings within a combat round will result in disqualification at the discretion of the judge(s).

F. A contestant may forfeit a match by "tapping out" at which point both contestants must immediately cease fighting.

* A contestant who taps out and then continues to fight will be disqualified from the entire competition.
* Contestants need to make their tap out as clear as possible, so that the judge(s) and competitors are aware of the tap out.

**VI. Rule Adjustments**

A. The battle rule set is a set of guidelines. They can, and often will, be amended to adjust to changing technology and venue conditions. If at all possible, feedback will be requested from contestants, builders and audience members to make the rule changes as fair as possible, but the final decision rests with the event judge(s).