

STEM Gals/NTX Rules 2022

We believe that the TRI rule changes were just right and have adopted these changes. Thank you, TRI, for allowing us use of their verbiage. STEM Gals & NTX Tournament of Robots 2022 will be using the FRC 2022 Rapid React rules except where noted below.

1. Game Rule Updates

1. All Yellow and Red Cards are now at the discretion of the Head Referee. Minor non-match affecting incidents will be given warnings before cards are given. Teams will not be punished for field staff giving them directions such as entering the field.

H105. Asking other teams to throw a MATCH – not cool.

A team may not encourage an ALLIANCE, of which it is not a member, to play beneath its ability. NOTE: This rule is not intended to prevent an ALLIANCE from planning and/or executing its own strategy in a specific MATCH in which all the teams are members of the ALLIANCE.

Violation: Behavior will be discussed with the team or individual. Violations of this rule are likely to escalate rapidly to YELLOW or RED CARDS and may lead to dismissal from the event (i.e., the threshold for egregious or repeated violations is relatively low.)

Asking/Encouraging a team not to play defense or allow your alliance to gain an RP is a clear and undeniable violation of this rule. There are almost no circumstances when a team should be talking to their opposing alliance about match strategy, and any such conversations will be investigated if reported. Any TEAM found to in any way be manipulating an alliance's match strategy for their own gain will be given a RED CARD.

H202. Be reasonable with the Head Referee.

Most situations will likely only require one or two people to talk with the Head Referee but we aren't going to institute a rule that doesn't allow other members of the drive team (including adult drive coaches) to provide information or listen to the conversations. Please be mindful that the Head Referee makes the final decision on calls but may be advised by other referees and the Event Director (replaces HQ at off-season events). Also please remember that C1 is a rule and the referee may give YELLOW or RED CARDS for any interactions that deem to be egregious. We are all working for the inspiration of our students. Be polite, reasonable, and respectful and we will all have a great event.

The original H202 causes more issues than it solves and is often not enforced to the letter of the rule. We trust our volunteers and our teams to be reasonable and act in good faith to get to the best outcome for everyone involved.

H303. Clothes/shoes are okay and backpacks and items in your pockets or backpacks are okay if they don't violate the other rules stated in H303.

Almost everyone has a phone in their pocket or bag, etc and everyone is wearing clothing so it should be in the rules. You still can't use your phone or a radio, etc to communicate with anyone during the match or any of the other violations but it's just weird that it's not clearly in the rules that it's allowed.

H501. COACHES and other teams: hands off the controls. A ROBOT shall be operated solely by the DRIVERS and/or HUMAN PLAYERS of that team. **Violation: TECH FOUL and Warning. Repeated/Extended: TECH FOUL and RED CARD.**

Coaches may touch the driver station laptop to diagnose a problem with the robot but may not directly contact any controllers or operate the robot in any way.

G204. *Stay out of other ROBOTS. A ROBOT may not use a COMPONENT outside its FRAME PERIMETER (except its BUMPERS) to initiate *more than inconsequential* contact with an opponent ROBOT inside the vertical projection of that opponent ROBOT'S FRAME PERIMETER. Contact with an opponent in an opening of their BUMPERS or in the space above the BUMPER opening are exceptions to this rule.

Violation: FOUL

G205. *This isn't combat robotics. A ROBOT may not damage or functionally impair an opponent ROBOT in either of the following ways *as a direct result of the contact*:

A. deliberately, as perceived by a REFEREE.

B. regardless of intent, by initiating contact inside the vertical projection of an opponent ROBOT'S FRAME PERIMETER. Contact between the ROBOT'S BUMPERS or COMPONENTS inside the ROBOT'S FRAME PERIMETER and COMPONENTS inside an opening of an opponent's BUMPERS is an exception to this rule.

Violation: TECH FOUL and YELLOW CARD. If opponent ROBOT is unable to drive *as a direct result of the contact*, TECH FOUL and RED CARD

For G204 and G205: Offensive Robots get the "benefit of the doubt". In the case where referees are forced to make a judgment call regarding a destructive interaction between a defensive and offensive Robot, or an interaction that results

in a questionable rules violation, the referees will err on the side of the offensive Robot.

G207. Let them shoot. A ROBOT may not contact (either directly or transitively through CARGO and regardless of who initiates contact) an opponent ROBOT **who is BUMPERS are** contacting their LAUNCH PAD.

Violation: FOUL.

H404. CARGO delivery. During AUTO **and TELEOP**, CARGO may be introduced to the FIELD by a HUMAN PLAYER in a TERMINAL AREA. **Violation: FOUL per CARGO.**

~~**H504 TELEOP CARGO delivery. During TELEOP, CARGO may only be introduced to the FIELD A. by a HUMAN PLAYER and B. through the GUARD. Violation: FOUL per CARGO.**~~

2. +5 pounds weight allowance and no formal inspections.

This allows for repairs and minor modifications without major work to maintain 125 lbs. Robots may weigh up to 130 lbs. We also won't have inspections at this event; event staff may ask you to make modifications if your robot doesn't meet the FRC robot rules.

3. Alliance Selection

- A. If we have more than 32 teams, The standard championship subdivision level alliance selection process will be used, including the 4 robots per alliance rules as outlined in the game manual. 1-8, 8-1, 1-8
- B. If we have fewer than 32 teams. We will use the standard 3-team alliance format from district/regional events.
- C. At the beginning of Alliance Selection, the Emcee will ask if any teams would like to withdraw from Alliance Selection. Any teams wishing to not play can withdraw at this time. After alliance #8 has made their first pick, teams are no longer allowed to decline invitations and all further picks will be assumed to be accepted.

4. Video Review

Given that the technology allows (video system doesn't go down, etc.), there will be a video review process for the elimination rounds.

- Each Alliance is allowed one challenge/review in the playoffs. The alliance captain will be provided a video review coupon in addition to their timeout coupon.

- Video review coupons must be given to the head ref during the same time periods in which timeout coupons are allowed following the match to be reviewed.
- Only match-affecting calls and yellow/red cards can be reviewed.
- The score or lack of score being reviewed must be significant enough to affect the outcome of the match. The Head Referee can choose not to review any call that they do not believe will change the outcome of the match.
- Video evidence must be indisputable to change a call. The point is to receive credit for an obviously missed score, not to debate further a close call that a referee already used their best judgment on. The Head Referee's decision is final after a review.
- Only the event-provided video will be used by the Head Referee during a video review. Referees will not review any other video footage, including camcorders, phones, or tablets not provided by the event.
- The Head Referee, at their discretion, may choose to review any ruling throughout the event. Please do not ask for a video review at any time other than giving the referee your alliance's video review coupon during the playoffs. All other requests will not be granted.

We don't plan on ever having this happen, but we want to provide the best event possible to teams; a video review of other situations may allow us to do this.

5. Soft Time Cap

To allow teams to get out of the event in a reasonable amount of time if we have match delays, we will be instituting a soft time cap during the event. At the discretion of the event organizers, if any playoff round (quarter-finals, semifinals, finals) starts after 6 P.M. Central Time, we will be moving to a "Best of 1" elimination format instead of the usual "Best 2 of 3" format.

6. STEM Gals & NTX Alliance Selection

The top 8 teams are not allowed to select each other. The selection sequence will be 1-8; 8-1; 1-8.

Since alliance selection will be outside the top 8, teams will not be allowed to decline unless they cannot stay for playoffs.