Robotics (VEX) - Division 50

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Entry Deadline:	January 15, 2019
Check In:	February 28, 2019, 4:00 PM to 8:00 PM in Arnold Hall. March 2, 2019, 10:00 AM to 4:00 PM in Arnold Hall.
Check Out:	April 11, 2019, 4:00 PM to 8:00 PM in Arnold Hall.
Group Entries:	Accepted

Rules:

1. Grade Levels: Middle School and High School Individual and Group entries will be accepted.
2. Number of Entries: Only one robot may be entered by an individual or team. Each teacher may enter a maximum of three robots from individuals/teams with no more than 5 student members per team.
3. Size and Materials Specifications: Robots are to be a maximum of 18"x 18"x18" or smaller at the start of the game. Refer to the guidelines in the In the Zone Manual, Section 4 The Robot at https://content.vexrobotics.com/docs/vrc-inthezone/VRC-InTheZone-GameManual-20180817.pdf
4. Entry Tag(s) must be adhered to the lower right corner of the engineering notebook's back cover. A copy of the tag must be securely attached to the robot entry.
5. Acceptable Entries: Each entry must consist of two parts.
    - Part One - The VEX competition robot which meets the guidelines set forth in the Vex In the Zone – Game Manual (Inspection Guidelines) document https://content.vexrobotics.com/docs/vrc-inthezone/VRC-InTheZone-GameManual-20180817.pdf
    - Part Two - An Engineering Notebook (per robot) with documentation, as set forth in the engineering notebook rubric and guidelines available at http://curriculum.vexrobotics.com/teacher-materials/assessment-tools/engineering-notebook and submitted in the form of a bound engineering notebook. The robot and accompanying Engineering Notebook must be submitted to the judging committee on project check-in day for evaluation.
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6. NOTE: ALL members, coaches, and guests in the pit area must have safety glasses with side shields or safety goggles on at all times. Each team is responsible for bringing their safety equipment. Failure to follow this rule will constitute a safety violation and may result in your team being disqualified.

7. NOT ACCEPTABLE: No team will be allowed to check-in their entry without the accompanying engineering documentation. Teams not passing inspection guidelines at check-in may be allowed to check-in their robot at the judge's discretion but will not be allowed to participate in a qualifying match until robot inspection has been passed.

VEX In the Zone Game Description:
VEX Robotics Competition In the Zone is played on a 12 ft x 12 ft foam-mat, surrounded by a sheetmetal and lexan perimeter. There are eighty Cones that can be Stacked on ten Goals, while some Goals can be Scored into Zones; teams also score points for having different types of Highest Stacks and by Parking at the end of the Match.

Matches are played on a field set up as illustrated in the figures throughout. Two Alliances – one "red" and one "blue" – composed of two Teams each, compete in each Match. The object of the game is to attain a higher score than the opposing Alliance by Stacking Cones on Goals, by Scoring Mobile Goals in Goal Zones, by having the Highest Stacks, and by Parking Robots. A bonus is awarded to the Alliance that has the most Cone and Goal points at the end of the Autonomous Period.

Competition Guidelines and Requirements:
There are eighty (80) Cones that can be Stacked on ten (10) Goals [5 per Alliance] during a Match. Some cones begin in designated locations on the field, while others are available to be entered into the field during the Match.

Each Robot (smaller than 18"x18"x18") begins a match on one of their Alliance Starting Tiles. Each Alliance has three Zones in which they can place their Goals. Alliances earn points for Stacking Cones on Goals, Scoring Mobile Goals in Goal Zones, having the Highest Stacks, and by Parking Robots. A bonus is awarded to the Alliance that has the most total points at the end of the Autonomous Period.

The Playing Field:
Participants can download specific information and a drawing of this year's competition field in the following document: VEX In the Zone – Appendix A (Field Drawings, Specifications, & BOM) located at https://www.vexrobotics.com/vexedr/competition/vrc-current-game.

The Robot:
All robot entries must meet the guidelines set forth in Vex In the Zone – Game Manual, Section 4 located at https://www.vexrobotics.com/vexedr/competition/vrc-current-game

Judging and Scoring Criteria:
Engineering Notebook
Engineering notebooks will be scored by a committee based on the rubric and guidelines at http://curriculum.vexrobotics.com/teacher-materials/assessment-tools/engineering-notebook . Tie breakers will be decided by the Engineering Notebook Review Committee.

Vex In The Zone Tournament
Ninety (90) Scoring Objects
- Eighty (80) Cones
    - Four (4) Cones, one (1) per Robot, as Preloads
    - Twenty-four (24) Cones, twelve (12) per Alliance, as Match Loads
    - Fifty-two (52) start at designated locations on the field o Eight (8) Mobile Goals, four (4) per Alliance
- Two (2) Stationary Goals, one (1) per Alliance
- Six (6) Goal Zones, three (3) per Alliance, for Scoring Goals
- Four (4) Parking Tiles, two (2) per Alliance, for Parking Robots

All teams must adhere to all VEX Robotics Competition Rules as they are written, and must abide by the stated intent of the rules. Th ere may also be periodic "Team Updates" posted on the VEX In the Zone webpage in the competition section of www.vexrobotics.com and www.roboticseducation.org . These updates are also "official" parts of the VEX In the Zone rules for the purpose of this competition.

Matches will be 2 minutes in duration. Winning alliances for a match will be determined based on total number of points scored. At the end of the Qualifying Round top teams will be named Alliance Captains and will have the opportunity to choose their alliance partners for the Elimination Round. The Elimination Round will consist of a best of 3 single elimination tournament. Details can be found in the In the Zone - Game Manual, Section 3h https://www.vexrobotics.com/vexedr/competition/vrc-current-game

Class Number and Title:
Class 5001 – High School and Middle School In The Zone Tournament

Premiums, Plaques and Trophies:
Purple Ribbon..... $10.00 and Rosette
Blue Ribbon 8.00
Red Ribbon 6.00
White Ribbon 4.00
Yellow Ribbon.....Ribbon Only

Vex In The Zone Tournament Trophies:
The Captain of the winning alliance will receive a team trophy identifying them as Team Captains for the Winning Alliance. The remaining two alliance teams from the winning alliance will receive Winning Alliance Team Trophies.

Robotics Engineering Notebook Trophies:
The top 3 scoring high school and middle school teams' notebooks based on the rubric will be awarded first, second and third place team trophies. Tie breakers will be decided by the notebook judging committee.

If there are no entries meeting the quality standards for any special awards, no award will be given.

If you have any questions during the construction of your robot about competition rules please refer to the Vex In The Zone game manual. For any additional questions please email Carmen Garcia at clgarcia@dadeschools. net or Melissa Fernandez at melissafernandez@dadeschools.net.