

## Robotics - Division 50

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### **Entry Form Registration Deadline - January 24, 2012**

**Arrival Date** - March 1, 2012 from 4:00 pm to 8:00 pm, in Arnold Hall.

March 3, 2012 from 10:00 am to 4:00 pm, in Arnold Hall.

**Release Date** - April 5, 2012 from 4:00 pm to 8:00 pm, in Arnold Hall.

**Group Entries** - Accepted

### **Competition Date:**

March 24, 2012, 1:00 pm in Arnold Hall. Participants may test their robots Saturday, March 24, 2012, from 12:00 Noon until 1:00 pm in Arnold Hall.

### **Division Rules:**

1. Each entry must be registered with the fair prior to the February 1, 2011 registration deadline.
2. Each entry must consist of two parts. The first, a VEX robot meeting the guidelines set forth in the Vex Gateway – Appendix D (Inspection Guidelines) document <http://content.vexrobotics.com/docs/vex-gateway/VEX-Gateway-AppendixD-Inspection-Guidelines-v.060811.pdf>. The second, accompanying engineering documentation as set forth in the engineering notebook rubric and guidelines available at (<http://teched.dadeschools.net/Resources.htm>) and submitted in the form of a bound engineering notebook. The robot and accompanying documentation must be submitted and turned over to the judging committee on project check-in day for evaluation. 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.
3. A fair entry tag must be adhered to the lower right corner of the engineering notebook's back cover. A copy of the tag should accompany and be affixed to the robot entry.
4. Only one robot may be entered by an individual or team.
5. Each teacher may enter a maximum of four teams with no more than 4 members per team.

### **Vex Gateway Scrimmage**

VEX Gateway Scrimmage will be played on a 12'x12' square field with two alliances – one “red” and one “blue” – composed of two teams each, competing in matches consisting of a twenty-second autonomous period followed by two minutes of driver-controlled play.

The object of the game is to attain a higher score than your opponent Alliance by Scoring Barrels and Balls in Goals, earning Bonus Points and Doubling or Negating Goals. This Vex Gateway Scrimmage will mimic a tournament in format and consist of a Qualifying Round followed by an Elimination Round. All matches will follow the Vex Gateway Game Manual with Special Modification A enacted to permit use of 75 mhz and/or cortex transmitters and receivers. Game Description taken from: <http://www.vexforum.com/wiki/index.php/Gateway>

## **Competition Guidelines and Requirements:**

### **The Game:**

There are a total of twenty-six (26) Barrels, eighteen (18) Balls, two (2) Doubler Barrels and two (2) Negation Barrels available as Scoring Objects in the game. Most Scoring Objects begin in designated locations on the field, while some are available to be loaded prior or during the match. Each Robot (smaller than 18"x18"x18" to start) begins a match on one of their Alliance Starting Tiles. There are thirteen Goals, of varying heights which teams can Score Balls or Barrels in. Alliances earn Bonus Points for having the lowest Ball or Barrel in a Circular Goal. Doubler or Negation Barrels which are scored alter the point values in a Circular Goal. The field is divided into sections by two 6' long PVC Gates that teams can lift during the Match.

Game Details taken from: <http://www.vexforum.com/wiki/index.php/Gateway>

### **The Playing Field:**

Participants can download specific information and a drawing of this year's competition field in the following document: VEX Gateway - Appendix A (Field Drawings, Specifications, & BOM) located at <http://www.vexforum.com/wiki/index.php/Gateway..>

### **The Robot:**

All robot entries must meet the guidelines set forth in Vex Gateway – Appendix D (Inspection Guidelines) located at <http://www.vexforum.com/wiki/index.php/Gateway>

Please note that Special Modification A will be in effect during this scrimmage to permit the use of 75 mhz control systems.

### **Judging and Scoring Criteria:**

NOTE: Please note that all members and coaches in the pit area must have goggles on at all times. Each team must bring their own goggles.

Tournament Game – Matches will be 2 minutes and 20 seconds in duration. Winning alliances 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 Vex Gateway Game Manual Section 3 <http://www.vexforum.com/wiki/index.php/Gateway>

Engineering Notebook – Total Possible Points: 100 for high school and middle school

**Class Descriptions:**

Class 5001 – High School and Middle School Round Up Tournament

**Premiums, Plaques and Trophies:**

Purple Ribbon .....	\$5.00 and Rosette
Blue Ribbon .....	4.00
Red Ribbon .....	3.00
White Ribbon .....	2.00
Yellow Ribbon .....	Ribbon Only

**Robotic Division Trophies:**

Class 5001 – High School & Middle School Gateway Tournament

- Gateway Tournament Trophies: The Captain of the winning alliance will receive a trophy identifying them as Team Captain's for the Winning Alliance. The remaining two alliance team's 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 will be awarded first, second and third place team trophies.

If you have any questions during the construction of your robot, please email Carmen Garcia at [clgarcia@dadeschools.net](mailto:clgarcia@dadeschools.net) or Melissa Fernandez at [melissafernandez@dadeschools.net](mailto:melissafernandez@dadeschools.net).

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