

Passaic County Community College S.T.E.M. Program Sponsors Team in FIRST Robotics Competition 2012

**Students from PCCC and JFK High School to Compete
March 9 at Rutgers New Brunswick**

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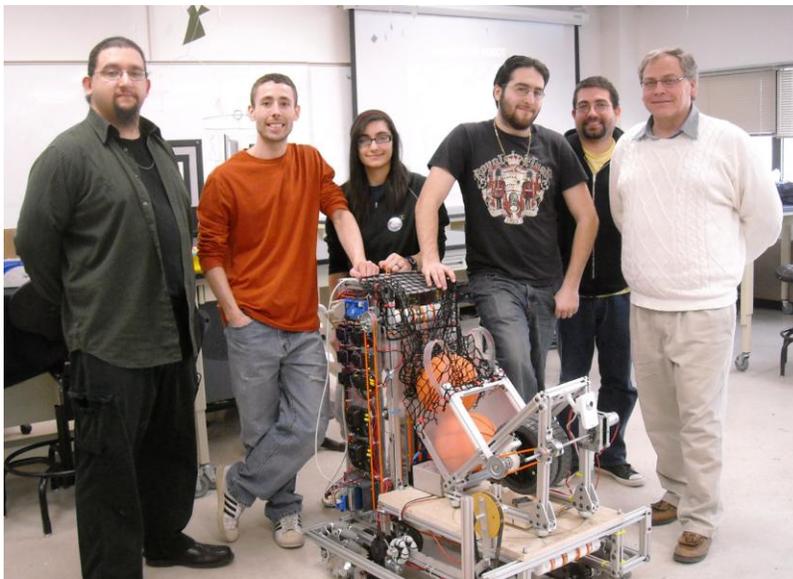


Photo by Linda Telesco

Dragonballer The Basketball Tossing Robot

Some of the PCCC team members pose
with Dragonballer (right to left)

Professor Brian Holton, Advisor
Lu Torres Rojas
Daniel Webb (chief mechanic)
Ghadeer Abuhamdeh
Andy Taylor (chief mechanic)
Paul A. Pacheco

A team from the grant-funded STEM (Science, Technology, Engineering, and Math) program at Passaic County Community College (PCCC) will take their entry Dragonballer, a basketball-tossing robot, to the 2012 FIRST Robotics Competition qualifying match March 9 at Rutgers University in New Brunswick.

“It’s the first time we’ll be competing in FIRST Robotics, and it’s very exciting for our program,” said Brian Holton, a physics professor at PCCC and team advisor.

The PCCC robotics team is composed of students from the College and from John F. Kennedy High School in Paterson. The college students mentored their high school teammates in creating, within a six-week allotted period, the 115-pound, battery-powered robot that can shoot basketballs up to 80 mph, then glide around the field to retrieve them.

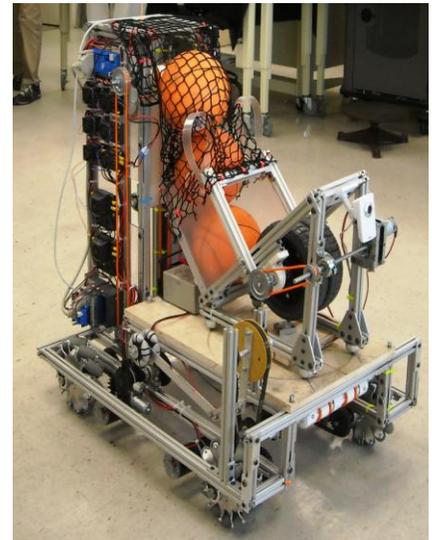
FIRST (For Inspiration and Recognition of Science and Technology) is a 20-year-old organization founded by an MIT professor to provide today’s youth with role models in the fields of science, engineering and technology. FIRST events aim to engage students in mentor-based programs that build skills and encourage collaboration and leadership.

About the Competition – ([click here to see a Rebound Rumble demo](#))

In “Rebound Rumble,” the name of the 2012 competition, teams direct their robots in trying to score as many basketballs in the hoops as possible during the two-minute and 15-second match. Hoops are set at varying heights and balls scored in higher hoops win more points. Top prize goes to the highest scoring robot, but there are also awards recognizing creativity in construction, collaborative team spirit, and more.



*(Right)
A close-up of
PCCC's robot,
Dragonballer.*



*(Left)
Daniel Webb
prepares to block
a pass from
Dragonballer.*

The PCCC/JFK team will be one of about 2,300 from every state in the U.S. as well as 14 other countries expected to compete this year, according to the FIRST website. Teams that qualify in March can compete in the April regional events in Philadelphia. Championship finals are slated for April 25-28 in St. Louis, Missouri.



PCCC student mentor Andy Taylor (right) shows Seren Ozer, a ninth grader at JFK High School, how to control the robot, as fellow JFK teammates wait their turn.

“At first I was scared I’d hurt someone, but then I enjoyed it.” said Seren, who is competing for the first time and hopes to eventually become a brain surgeon.

“I felt a sense of accomplishment,” she added.

(continued)

Robotics Teaches Students Skills and Teamwork

“It’s amazing to see the effect a FIRST competition has on students,” said Professor Holton who compared the competition atmosphere to that of a sports event. “It isn’t just about the winning,” he added. “It’s about the creative process and building enthusiasm for the STEM disciplines.”

For the past weeks, the STEM lab on PCCC’s main campus in Paterson was buzzing with activity every day as the high schoolers rushed over after school to learn, work, and socialize with their PCCC mentors. “I would be here 24-hours a day if I could,” said Andy Taylor, a PCCC math major and a chief mechanic on the project.

"I cannot put into words how impressed I am with our students," said Gilman Choudhury, a college prep STEM robotics instructor at JFK High School. I have never seen such a group of students this motivated. I am proud to be their teacher in this great endeavor," he added.



Angelica Abdool (left) a math tutor in the PCCC STEM program, was introduced to robotics as a high school student in Newark. She later became a mentor and now is a coach.

“I developed confidence and strength,” said Abdool who emphasizes the value of the program for urban students who are often underserved. “The people you worked with treated you like you were important.”

The STEM program at Passaic County Community College was established in 2009, through a prestigious \$1.7 million grant from the U.S. Department of Education to expand and enhance education in the fields of science, technology, engineering, and math .

To achieve those goals, PCCC launched an ambitious two-year project entitled *Passaic Partners for STEM Innovation and Achievement* (PPSIA), collaborating with area high schools to increase the number of students enrolling into the College’s Science, Technology, Engineering, and Mathematics (STEM) programs. The project also aims to improve the rates at which students successfully complete the programs and transfer to four-year institutions.

[More about S.T.E.M. at PCCC](#)

[The John F. Kennedy High School Robotics Program](#)

[Read more about FIRST Robotics](#)