Berrien Springs Partnership Lab Syllabus and Instructor Qualifications

COMMUNITY CLASS TITLE: Robo-Tech Zone of Michiana

GRADE OR AGE LEVELS: 7-12 Grades

FORMAT: IN-PERSON

DAY AND TIME OF THE WEEK: Thursdays 4pm-8pm

TOTAL REQUIRED HRS: 4

ADD'L POSSIBLE HRS (OPTIONAL TIME): Competition dates/times TBD

TOTAL SEMESTER HOURS POSSIBLE: 72+

LOCATION: New Bell School 1830 S. 3rd St., Niles, MI 49120

INSTRUCTOR: Marla Brennan and Cheryl Heiser

CONTACT INFORMATION: email: webuildbots123@gmail.com

ADDITIONAL REGISTRATION AT SITE REQUIRED? NO

INSTRUCTOR QUALIFICATIONS:

Instructors have 14 years combined experience in the robotics field, the last two of which were spent as head coaches of three competitive robotics teams.

COURSE DESCRIPTION (OVERVIEW):

Students will work together in small groups to design, build, and program a robot to participate in this year's challenge. The team will meet for a minimum of one evening a week for 4 hours each time. Students will be required to attend at least one class a week. Additional meeting times will be scheduled as needed to work on the robot to achieve success.

During the semester, students will participate in several competitions which may include 5-6 league nights on Thursday evenings in Grand Rapids, and possibly two all day Saturday events in Grand Rapids. If teams progress beyond the regular season, to State, Nationals, or Worlds, the season may continue through April.

National and World Events take place out of state, typically Wednesday through Saturday. Travel and hotel expenses will be the responsibility of each family. Families will be encouraged to participate in fundraising events throughout the season to help offset these costs.

SYLLABUS/OUTLINE: WEEKLY BREAKDOWN OF PROJECT-BASED LEARNING LAB ACTIVITIES

Students will be meeting weekly to plan, collaborate, build, and modify a competitive robot with their teammates.

Beginning with reviewing this season's game challenge, students will use available resources to design, build, and program a competition ready robot.

Each week students will recap the previous week's build sessions and discuss what modifications and improvements worked and which need to be reevaluated.

COURSE OBJECTIVES AND APPROXIMATE TARGET DATES:

Throughout the fall semester students will be working toward advancing to the State, National, and World level championships in the spring by competing throughout the season at various regional competitions. Competition dates and times are TBD by the VEX Robotics calendar of events.

Through robotics, students can learn more than how to design and code a robot. They can learn skills in leadership, community involvement, communicating across different technology platforms, finding their passions, and teamwork, which will position them for success well beyond their school years.

STUDENT ASSESSMENT - what will be used to evaluate student progress and/or end of semester pass/fail status?

1) Student agrees to attend at least 80% of class sessions/lessons offered. Attendance is kept online and tracked by Partnership staff. Failure to meet 80% or be on track to meet 80% may result in program discontinuation.
2) The Partnership Student Assessment or Performance Form is filled out by the teacher and turned in to Partnership staff. The link to this form is found on the web page for this class. Failing marks for lack of participation, behavior issues, practice time, etc. may result in program discontinuation.

Class-specific assessment:

We will evaluate each student using the BSP evaluation form and passing criteria will be based on student attendance and participation in weekly class sessions.

ADDITIONAL RESOURCES: (online, books, video, etc.):

VEX Robotics 2021-2022 Game Reveal

CLASS POLICIES: ATTENDANCE, BEHAVIOR, WEATHER, ETC.

Attendance: attendance is required, and students should notify the instructor in advance of any absence.

Behavior: any behavior issues will first be privately brought to the attention of the parent and, should the behavior persist, to the partnership staff.

Weather: classes will be cancelled on any days when Brandywine Public Schools are closed.