Berrien Springs Partnership Lab Syllabus and Instructor Qualifications

LABS (CLASSES) ARE PROVIDED AS AN EDUCATIONAL SOURCE FOR PBL (PROJECT BASED LEARNING)

COMMUNITY CLASS TITLE: VEX Robotics; roboTech Zone of Michiana

GRADE OR AGE LEVELS: 7-12 (6th grade by invitation/application/interview)

FORMAT: IN-PERSON

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

TOTAL REQUIRED HRS: 36

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

TOTAL SEMESTER HOURS POSSIBLE: 60+

LOCATION: SMC Niles Campus. 33890 US-12, Niles, MI 49120. Rm 157
INSTRUCTOR: Chris Kimmey, Bob Smith

CONTACT INFORMATION: 517 227 7500 GoTeamRoboTZ@gmail.com

ADDITIONAL REGISTRATION AT SITE REQUIRED? Yes

INSTRUCTOR QUALIFICATIONS; Instructors have 15 plus years combined engineering and technical experience. The last two years were spent in the robotics field as head coaches of three competitive robotics teams.

COURSE DESCRIPTION (OVERVIEW): The program is centered around VEX VRC, competitive robotics. Students work together in small groups to design, build, and program a robot to participate in a new game-based engineering challenge every year..
STEM concepts are put to the test as students learn lifelong skills in teamwork, leadership, and communication.

During the semester, students will participate in several competitions which may include 4-5 league nights on Thursday evenings in Grand Rapids, and possibly two all day Saturday events. Our program also accommodates in house scrimmage teams for those that cannot travel. For those teams progressing 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, which may help to offset some of these costs.

Usual Meetings times are Thursdays from 4pm-8pm with some Mondays as needed. League nights and tournaments may vary.

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

Students work in small teams and will follow the engineering design process throughout to build and program a competitive robot capable of meeting the requirements of this year's game challenge. This involves defining the game, including scoring and strategy. Students develop solutions, design, build, test, verify, and continually evaluate and optimize the robots all while documenting the process. COURSE OBJECTIVES AND APPROXIMATE TARGET DATES: Students will work towards understanding the engineering process while building and programming a basic robot for competition within the first six weeks of class prior to going into the first competition.

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 into 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.):
https://www.vexrobotics.com/v5/competition/vrc-current-game

CLASS POLICIES: ATTENDANCE, BEHAVIOR, WEATHER, ETC.

Attendance: Attendance is required and the instructor is to be notified in advance of any absence.

Behavior: Any behavioral issues will be addressed with the student and parent. If the behavior persists, the student will be referred to the BSPP staff

for further recommendations or removal from class.

Weather: Classes will be canceled in conjunction with SMC school system closings.