

Berrien Springs Partnership Lab Syllabus and Instructor Qualifications

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

COMMUNITY CLASS TITLE: 3D Engineering by Crafting

GRADE OR AGE LEVELS: 2nd - 6th grade

FORMAT: IN-PERSON

DAY AND TIME OF THE WEEK: Wednesdays, 3:00-5:00 on 9/10/25 and 10/29/25

TOTAL REQUIRED HRS: 13

TOTAL SEMESTER HOURS POSSIBLE: 16

LOCATION (address):

Innovation Central at *Lakeside Family Church*

6999 Red Arrow Highway

Stevensville, MI 49127

ADD'L POSSIBLE HRS (OPTIONAL TIME):

PRIMARY INSTRUCTOR: Becky Davis

- list additional instructors that will be background checked:

In the event of an instructor absence, Innovation Central reserves the right to substitute instructors.

CONTACT INFORMATION: phone: 269-408-6631

email: beckymullikin@gmail.com

ADDITIONAL REGISTRATION AT SITE REQUIRED? NO

INSTRUCTOR QUALIFICATIONS (may attach a separate page if necessary):

20+ years experience in subject matter Volunteer instructor for STEM4Them c3 non-profit

COURSE DESCRIPTION (OVERVIEW): Students will learn how to engineer different creations through model crafting. With each project, the students will experience building a base model and then the ability to use their creativity to customize their work.

SYLLABUS/OUTLINE: WEEKLY BREAKDOWN OF PROJECT-BASED LEARNING LAB ACTIVITIES
Lessons in engineering modeling 5 step process to test and execute designs Utilizing equipment and tools for models Project planning and meeting deadlines Crafting each project with the instructor's requirements Customization based off unique preferences and experimentation

COURSE OBJECTIVES AND APPROXIMATE TARGET DATES:

Every class, the base model will match the presentation model before customization occurs. The first class is when expectations are introduced and the engineering process is implemented. By 2nd week of class students should be able to talk through the 5 step engineering process. Each week in class is a different crafting project to add to their modeling portfolio. By 4th week, students will be halfway through the semester and should understand and be thriving within the class flow.

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.
- 3) Other: (please list)

Class-specific assessment: No extra forms required. A hand out of project instructions and the 5 step engineering process are provided to students, in addition to a drafting journal to test out modeling concepts.

ADDITIONAL RESOURCES: (online, books, video, etc.): Instructor will provide all modeling and class materials. Instructor will store projects until the last class. During the last class, student will be able to display their assorted projects for parents.

CLASS POLICIES: ATTENDANCE, BEHAVIOR, WEATHER, ETC.

Attendance: The Partnership requires 80% attendance during this 16 hour course to pass the class. Please let your instructor know if your student will not be attending due to illness or vacation. You can just call and leave a message or text your instructor.

Weather: If Lakeshore Public Schools, closes for weather, we will not have class. No matter where you are coming from, if you do not feel safe going out, then please stay home and just let your instructor know via a text or voicemail. We will hold a make up class or arrange an at home activity for your child to complete if needed.