October 4, 2023

612 Tiger Drive
Excelsior Springs, MO 64024

Dear Innovative Design Students:

Engineers and entrepreneurs attempt to identify and solve problems within society. However, finding a worthwhile problem is not an easy process. During this project, we will dig deep into the EDPPSR that we will use throughout Innovative Design to explore the steps of the process. Additionally, you will be guided through procedures and protocols that professionals use. These procedures and protocols will be important for you to become familiar with as they will be the same you will use on your future projects.

We will begin our work by developing a problem statement. Once we have clearly and objectively identified and defined our problem, we will begin to validate it. The process of validation will include determining attack paths, researching and analyzing prior solution attempts, and fully understanding and empathizing with the concerns of our stakeholders and target market. Once we have developed our problem, you experience procedures that professionals use to consider the viability of designs, construct testable prototypes, test prototypes, collect and analyze data, and consult with experts.

For this project, you will be tasked with identifying a group of your classmates that share similar design interests as yourself. You will work with these people closely as you brainstorm ideas, research prior solution attempts, identify solution criteria, and follow the procedures and protocols described previously. In order to promote group cohesiveness and productivity, each group will develop a group contract that all members will agree upon and sign. Groups will work together to identify necessary roles needed for project success, and assign these roles to individuals based on their strengths, interests, and abilities.

There will be some important deadlines during this project by which specific tasks will need to be completed. In order to provide the necessary supplies and that you have enough time to create prototypes, each group will need to provide a detailed supplies list by October 20th. You will use your supplies to construct a testable prototype. You will test your prototype and collect data the week of November 6th. Finally, your group will develop a working prototype that will be used during your final product pitch on November 16th.

There will be benchmarks during this project that will support your learning. Your facilitator will also provide resources and workshops to increase the quality of your work. Finally, you will be evaluated on the Knowledge & Thinking, Collaboration, Oral Communication, and Written Communication rubrics during this project. Good luck and I hope you enjoy this learning journey!

Sincerely,

Mr. Harman
Facilitator: Innovative Design