BMED 2110 Project Phase 2 Product

Deliverables (by 8:00 pm 4/22/2021)

In phase 2 of your project, you are expected to propose recommendations for pursuing future designs and/or research efforts that will help to create value for people who are not currently positively impacted, or perhaps are even negatively impacted, by the current design. Your report should be appropriate for readers who are engineers in a position to affect changes in future designs.

In this phase of the project, you have the opportunity to use the analytical approaches you've learned throughout the semester to perform an engineering analysis about the biomedical or biological system you studied during Phase 1. In this engineering analysis, you should evaluate the design and/or process that already exists and illustrate one shortcoming in the design from a quantitative point of view. This engineering analysis should use the concepts learned in this course (BMED 2110). You can check the course learning objectives on Canvas. Your engineering analysis should include an engineering diagram, any key assumptions and estimates you have made, and the mathematical calculations that support your critique.

Then, you should propose a new design or modifications to the existing design that help resolve its current shortcomings.

Your analysis and proposal should include the following specifications:

1- The diagram(s) or figure(s) to clearly identify: the system, system boundary, sub-units, surrounding (environment), streams, materials and also the quantities (values).
2- The factual information and theoretical concepts such as: mathematical calculations, tables with quantitative data, assumptions, etc.
3- The time frame and spatial scale of the design or process that you analyze and/or propose.
4- Detailed elaboration of your analysis and proposal with proper APA references.