ENGR 2112 Strength and Testing of Materials Spring 2020

Project

In this project you are required to design a pedestrian bridge to cross over a road. The figure below shows an example of such a bridge. You can select any suitable design based on real bridges that you see in Egypt. This is an individual project. You are required to:

1. Define the design requirements for the bridge that you plan to design (The width of the road, the maximum no of people it can carry …etc).
2. Define the loading conditions.
3. Define the internal reactions for all the components of the bridge.
4. Select a suitable material and hence find a suitable cross section and geometry.
5. Present a report showing your design calculations and drawings.

Phase 1 covers items 1 and 2 and is due on Thursday April 16, 2020. The second phase you will be completing steps 3-5. This phase will be due Wednesday May 6, 2020.

