

spaces. The subject of heat transfer and the procedures and calculations used in this class are required when designing and analyzing HVAC chillers.

- 4.) I have not had the opportunity to perform any of the calculations required in this class for my current role at Daikin.
- 5.) If I am ever given the opportunity to be involved in a new product design for a chiller, I assume that I will have to use these principles and perform heat transfer calculations to ensure the proper design is created to achieve the desired performance of the chiller.
- 6.) Yes, the material in this class is very important, especially in my field of work. Having a base knowledge of heat transfer can help me in future roles or projects at my current job.
- 7.) I believe I will apply the knowledge I have gained in a future role at my current company. I have always been interested in new product design and hope to one day be able to be involved in the design work for a new product line.
- 8.) If I was starting this class again, I would make sure to be more thorough in my reviewing of the material posted on canvas. I would also make sure to do all practice problems possible including the examples in all lectures and in the book. I think that this would have helped me with fully grasping each step in the procedures being used in these complex problems.

3.

- 1.) This class has helped me see the bigger picture when it comes to the design process of a product. Currently at my job, I review a lot of bills of material and must make corrections when issues arise based on build configurations. It was interesting when having to create our own BOM for the design project (<https://sites.wp.odu.edu/jberr-75/final-budget/>). There were a lot of considerations that had to be made when choosing materials based on dimensions, costs, and manufacturability. The most difficult part of the creation was keeping a simple design, so the cost stays down while also meeting the cooling time of 5 minutes. This cooler had to be something the public could afford while also being something that was easy to use and service.
- 2.) I think the biggest accomplishment in this class would be the design of our final project (<https://sites.wp.odu.edu/jberr-75/proof-your-design-works/>). Our team bounced a lot of different concepts back and forth before committing to a relatively simple design. Based on the calculations made for our design we also were able to achieve the desired results of cooling our can in less than 5 minutes. The cost for our design was also fair when considering the average cost for a higher end cooler. I think our team worked well together, and our project was a success.