

## Final ePortfolio Reflective Letter

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1. Over the course of this class, I have learned a lot about fluid mechanics. As the class has gone on, I worked on this ePortfolio to keep track of this journey as well as a way to showcase my work in a nice way. There were quite a few course objectives that we learned and a lot of them are presented here in my ePortfolio. I learned how to compute pressure, forces, buoyancy, friction losses, along with specific industrial problems that involve open-channel flow, cavitation, water hammer, drag, lift, and forces in pipes. I also learned about the concepts of how fluid works and how it reacts, applying the principles of conservation of energy, and how fluid-machinery works. As I mentioned, a lot of these are demonstrated in my ePortfolio, whether it be in my homework assignments, my tests, or my project.

2. A) Where is my learning demonstrated in this course?

It is demonstrated in my homework assignments, tests, and project.

- <https://sites.wp.odu.edu/met330sbroussard/tests/>
- <https://sites.wp.odu.edu/met330sbroussard/hw/>
- <https://sites.wp.odu.edu/met330sbroussard/project/>

- B) What areas did you feel you were most successful, or improved the most?

I felt that I was most successful with the open-channel flow topic. I felt the most confident on the second test.

- <https://sites.wp.odu.edu/met330sbroussard/tests/>

- C) How do you see this course's content intersecting with your field or career?

I'm really not sure if I would do work like this in my career. I haven't decided exactly what I want to do yet.

- D) Have you been able to apply concepts you have learned in the course to what you do at work or in other courses?

I have not applied the concepts to my job, but I have applied them to another class. I took fluid mechanics laboratory, where some of the concepts were applied.

- E) How, when, where, and why you might use this information or skill in the future?

I might use what I learned in future classes. If another class involves fluids at all, I would assume that I will use my knowledge from this class.

- F) Do you think what you learned is important for your professional career?

Yes, because I might have to design another system, similar to what I did with the project, so I would use what I learned from that and apply it to the design.

- <https://sites.wp.odu.edu/met330sbroussard/project/>

G) Where do you think you will use everything you learned?

If I ever have to deal with fluids I would use the concepts I learned and apply them, or if I had to design something, I could use the steps I followed in the project and apply them to the design.

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H) If you were starting this class again, what advice would you give yourself to ensure that you had a successful semester?

I would tell myself to start assignments early. It is important to be able to brainstorm about what I need to do, that way I have a good understanding of what I need to do before actually starting.

3. A) After taking this class, in what ways have you improved as an engineer? What brought about those improvements?

I think I was able to improve with working on a large project with a group. I have never worked on a semester long project with a group, so I think it gave me more skills and knowledge about how to handle working on big projects with other people in the future.

B) What was your biggest accomplishment in the course?

I would say my biggest accomplishment is getting the project done. It took quite a bit of time and organizing to make sure everything was done properly and on time.

C) What skills did you master in this course? How are they reflected in the assignments?

I wouldn't say that I was able to master any skills in this course. I think I would need more time and practice to be able to say I mastered something. But I would say I did well with open-channel flow. Test 2 demonstrated this topic and it was my best test score.

D) What do you feel are your strengths and weaknesses?

My strength would probably be, being able to get all the work done in a concise and clean way. I believe it shows in the project. My weakness would probably be my test scores. I don't think I gave myself enough time to really think about some of the problems, which hindered my results.

E) How did you think about this course before you took it and how you think about it now that it is over? How many of your assumptions or understandings changed? Why?

I heard from quite a few other people that this class was going to be hard and that I would be using Bernoulli's equation a lot. Now that it is over, both statements were correct.