

Senior Portfolio

Integration, Experiential Learning, and Personal Educational Program

Courses in your major

While I have had many courses in my major there are a few that made the biggest impact, or ones that I learned the most from.

Intro to programming was my first programming class where I was first taught how to start programming. From the beginning of the class I knew nothing about programming as showed in artifact 1. After intro to programming and intermediate programming you can see the level that my code was on was much higher. In intro to programming we learned things like the regular syntax that is supposed to be used while programming and how to correctly write your code. There are unspoken rules we were taught also. These are things such as that your code should always be spaced correctly and easy to read. Not one massive chunk. Your code should have meaningful short comments so if someone else uses your code they know what they're doing. I was also taught many different methods and how to import packages. I was also taught how to understand the documentation for some of the methods so I could properly use them. You can see how I applied all these things when you view my code which is artifact 2.

The internet is something that we use everyday, but do you know how it works? My data communications gave a very long in depth explanation of how the internet works and common things that go wrong. We were taught many different things, from how to diagnose various issues that could come up with the network and how to fix them, to how complicated it is to even get to google.com. We also learned the basics of dropping cable and what kind of cable is used where and how. This was very helpful when I was help wire up my parents house when they were building it. I was able to use the skills I learned in class to help wire up the house and set up the network. I was able to determine what kind of cable I needed to use and how to properly connect it.

Data structures was my third class where I learned how to use the java programming skills I acquired for more of a real purpose. During this class we got into groups and decided on a half-semester long project. With these groups we were able to learn new stuff and ever member was able to do what he is strongest in. We also did not know how to do many things so we sometimes had to turn to other group members, the professor, or online forums. This way we were put into what was closer to a real work environment. Some of the things I learned from this class helped me while I was at an internship later. One of the things I learned while working on the project is that you always have to have someone managing your github pull requests or you will make a massive web that cannot be fixed. I also learned that often prewritten classes and methods can save you lots of time instead of doing everything yourself. If you don't use the included classes and methods, it is like reinventing the wheel.

Mobile app development is a class where I was able to bring my java skills from intermediate programming and data structures together. I was also able to learn xml in this

class. When I combined these things I was able to design an android app that was useable and I even put it on my phone. The app was a task manager that you could add tasks based on your location.

With animation and 3d programming I was introduced to a whole new level of what you can do with code. With babylon.js I was opened up to a whole new level of what programming can do. With Babylon.js I was able to make full on animations of whatever I needed. You can apply physics to anything you need and it would be as if it was a real object. The framework was easy to pick up on and you could quickly learn how to use it. We also learned how to use blender. Blender is a 3d creation suite program. With blender we were able to make various things such as a 3d image of a doughnut with a cup of coffee, this image is included in artifact 8. The class got in groups and using blender and Babylon.js. The groups in class were able to make animated videos and even a game. With this knowledge I was able to apply it and make a logo for my website.

I have several goals for my career. My short term goal is to get a job I enjoy that will work with code. This way it will let me learn how to be a better and more effective programmer. This may also teach me how to be able to manage a similar company so I could be led to my ultimate goal. My ultimate goal is to eventually start my own business with several employees being a contractor writing code for other companies.

I have used the knowledge that I have gained to help people and myself. I learned how to program with one language which helped me to learn other languages. I was able to apply the knowledge I had to get an internship in which I helped make a website that could be run off

of a raspberry pi server. This website was to help people who could not read to get an audio translation. The website was also there so people could add translation and the website would sort them so an administrator could sort them in the correct way. I also used the knowledge to make an application for work so that I could keep track of all the things that I have in inventory. We have lots of tires in stock but it is always a pain going and trying to find the right one. Instead I made an app so that I can find what I need instead of having to go to the shed. The skills I have learned have shown to be very useful in my life as I use the skills I learned to make money and make a change.

When you are trying to learn a

Experiential Learning or courses with a significant off-campus component.

Personal and community health was a course I took with significant off-campus component. It was really eye opening seeing how much the people in this small area struggle with the simple things in life such as even getting some food. We payed several visits to a place in Harrisonburg called OCP. We would come in and lead some activities with the people there and It was a struggle to connect with the people there while talking to them. I felt as if I was always being judged for being better off. I saw how many of the things I have in life are not by my own work but because of the way I was led earlier in life. Some of the people I had met there had changed the way I think about people who are in rough financial and life situations. I saw how some of these people did not used to be that way.

A decent amount of the people did not to seem be in the world around them, I am not sure if it was because of drugs or mental issues. The people who had mental issues were getting no help with their issues and seemed to be struggling. These people had no support system there for them, and they were struggling to even make it through life let alone making it somewhere in life. One man I talked to kept talking to be about the same topic every five minutes, he had short term memory loss. We set up a few simple games to play with the people and it was surprisingly easy to get them to play games with us. When you start playing games or cleaning with them the borders between often disappear and you don't feel like you're being judged.

The experiences there led me to volunteer time at the homeless shelter too where I had helped with the preparation and serving of the food there where we then talked to the people

there. Meeting these people have made me put my life into a different perspective. They have made me want to not waste time but to live my life the fullest. Some of the people inevitably ended up there from mental issues and their upbringing. Bringing in a philosophical topic, do we have free will or all of our choices based on previous experiences? Were all the people there going to end up there inevitably or did some have the free will to not end up there? I started reflecting on myself and seeing how I could prevent myself and my loved ones from ending up there and how if there was a way to help those people there to get out.

I was pleased to learn that places like OCP have programs where they teach people the dangers of things like burglary and how crime does not pay. Things that the people actually need. The thing is that there will always people in need and sometimes all that we can do is just try to help them out of the rut they are in so they can continue with their life. There are many stories of people who were in places OCP and they were able to get out and move on with their life, living a successful life.

Engage Diverse Perspectives

Fine arts, literature, history, philosophy, religion courses.

Before taking Intro into Western music I did not understand the complexity behind the music that we listen to. As I progressed through the class I was able to learn more and more about the structure of the music around us and the structure of classical music. This structure helped me to enjoy classical music and I have even gone to several classical music concerts outside of the class setting. I was also able to learn a few things about music theory that helped me to be able to take outside of school when I play bass guitar in a music group or when I am playing the piano.

While taking world history since 1500 I was able to get an entirely new perspective on world history that I never received in high school as the professor was more free on what to focus on. We were able to see why some countries have the types of relationships that they do with the United States.

Philosophical questions has entirely changed my perception on the world around me. The class has made me question many of the things that I believe in. It makes you ask why you do why you do? This brings up many topics and interesting things to talk about with friends. These philosophical topics have also made me have a new appreciation for philosophy and philosophers. This led to me to do a lot of reading and studying outside of the class for my own interest. The class has led me to be a better citizen from the way I criticize myself from the way I learned to question my actions and ideas from the class.

General Psychology taught me many things about the basic psychology about people and my own brain that I did not know. The labs we had to do with upperclassmen showed how the things we learned in class were true. Such as we can only remember a few things such as some letters, but if we organize the letters into a pattern we can remember much more because with the pattern we are only remembering 5 pieces of data, whereas without recognizing a pattern to remember the same letters we would need to remember 15 pieces of data. This simple technique helped me to learn information for other classes that I needed to remember a lot of things. If I was able to find a pattern in the data I could remember the data easier and for longer. Some of the phenomenon that we learned about in this class I was able to recognize in regular day to day interactions. Such as how people can remember a story, clear as day, in a way that never happened.

Physical geography taught me things about the Shenandoah valley and the world that I never know. The things I learned in this class I was able to talk to other people and explain the origin about the mountains and the valleys of our Shenandoah valley. The class also inspired me to travel to see some places in the world by showing us the natural beauty of some of the places around the world.. I was able to examine the rocks on Bridgewater College property and was able to trace where these rocks had come from.

Literature and romantic realism showed me an entire new perspective on literature. This class showed me how to delve deeper into the minds of the great poets of the last couple hundred

years. I was able to understand some of the things that my parents talk about when they mention Dostoevsky or Pushkin. This class also brought me back to the joy of sitting down with a book, which has led to me to enjoy many other books which has led to learn much more about even other topics such as Philosophy and history.

Global Citizenship & Intercultural competency

Global Dynamics classes

Latin American politics

Often when we try to discuss politics we do not understand why certain countries hate America or why America acts a certain way to certain countries. Such as why a handshake between Obama and Chavez was such a big deal. Dr. Stoyzek showed me an entirely new perspective from which to view politics and why some of the Latin American countries are still struggling to make it out from poverty or a poor economy. I was also taught about the struggles and the appeal of communism for those countries. Being able to study the Latin American countries was a very nice way to understand why and how the middle east got into the position that it is in. With the information I learned in that class helped me connect with other people who know much more than I do in politics and I was able to learn more from them. The class also inspired me to visit Central and Latin America and I have visited Nicaragua and Honduras since then. The things I learned in that class opened my eyes to the whole world of politics and made me want to study more in the field. If my class schedule would have allowed I would have tried to minor in Politics as it caught my attention so much.

Food politics

Eating, it is kind of important. It only makes sense there are politics involved with food and the things that follow along with it.

Language courses

A Czech proverb says “You live a new life for every language you speak. If you know only one language, you live only once.” By learning Spanish I live another time. I wanted to learn Spanish because my knowledge of Ukrainian has opened so many doors of meeting new people, making friends, and even relationships. The learning I did in Spanish class was only the beginning. It set me up with a good base that I could start learning from. When I went to Puerto Rico, while I had a difficult time communicating with the locals I could understand much much more than I could ever understand without having the knowledge that I learned in the class. With even the basic knowledge of Spanish it opens up new doors for me, let it be in business or travel. I also appreciate how this helps me communicate with people that I would not be able to before. I have friends from Central America and sometimes even my limited of Spanish helps me understand the things they say. Learning Spanish only makes me want to add more languages to the other 3 languages that I am already fluent in.