

Abigail Le

Professor Kaul

CSC – 141

September 14, 2024

Reflection and Strategy Essay & Development Plan

As a first-year student in college, I am aware that my career choices may change, my passions may change, or my goals may change. At this moment I desire to pursue a career in biotechnology. Biotechnology is the first career option I found an interest in and felt a pull towards. I started with an interest in computer science because I have many family members in the field, and the salary was attractive. Since I have had somewhat of an interest in biology, I investigated the combination of the two which was biotech and found that there are numerous subcategories to the career. During my research on this career, I realized how much work it would be to work in biotechnology and get through the schooling. The book mentions “the key to mastery is hard work.” While this idea can sound cliché and obvious, hard work, repetition, studying, hands-on work, is what will get me the job that I want. While researching, it was hard to decide what job within biotech appealed to me most. Biotechnology combines knowledge from biology and technology to better health services, food production, and overall, the well-being of society. There are 8 categories/fields of biotechnology which can be separated into colors. First, there is red biotechnology which involves medicine. Gray, also referred to as white biotech, deals with industrial processes, focusing on creating new chemicals for industrial purposes. Green biotechnology involves agricultural practices and improvements. Gold biotechnology involves

how biotechnologists collect and analyze data to treat patients with the best care. Blue biotechnology deals with the aquatic side of things where fuel sources stemming from algae and bacteria are being discovered. Yellow biotech focuses on food production. Violet biotechnology is where you will find where legal issues abide, ensuring ethical principles and practices are followed. Lastly, dark biotechnology involves things such as chemical warfare and is one of the more dangerous sides of the field. I envision myself in either gold or green biotechnology. Gold biotech intrigues me because of the technical side of things, where people create programs to analyze things such as DNA. Green biotech also interests me, because I am a strong advocate for saving the environment and improving agricultural processes. Being able to create technology or programs to help either people or the environment is what I aim to do in my future.

With this career choice, there are many skills that I must learn and be somewhat proficient in. The book mentions technical skills and soft skills. There are many technical skills when it comes to computer science, but soft skills are stated to also be important. I am hoping to improve on programming languages, software proficiency, and analyzing data. Programming languages is overall something I have wanted to improve on since around 10th grade. As though that is a skill that many companies would want their employees in computer science to understand thoroughly. Additionally, software proficiency is an important thing for companies when they are hiring, as knowing or being able to easily learn how to use a specific software is an advantage. Analyzing data is an especially intriguing skill to acquire because of my interest in DNA analysis and being able to create software to read and analyze the data. The book states when it comes to the marketplace, success is more easily achieved when there is proficiency in soft skills in addition to technical skills. The book gives multiple examples, but the soft skill I most need to

improve on would be public speaking. I want to be able to get my point across without providing too much or too little information. I also want to be able to speak clearly and with confidence, not allowing my nerves to take over and give me a shaky voice.

With the pursuit of these skills, I am hoping to stay disciplined and focused when learning. I often struggled and still struggle with focusing when I must sit still, my mind wanders because in all honesty thinking about academics is draining. To combat this, I try to stimulate my brain to the right amount so I can focus. Sometimes that involves listening to music while I study, scribbling blindly on a paper while I read, or taking a break to do something physically stimulating. Another thing I find myself struggling with is getting easily distracted when put in an environment not built for academics. For example, when I am home there are dozens of things to distract me. Usually, to not give in to distraction, I will try to separate from it by throwing my phone across the room or leaving my room. Additionally, I will set timers that I must in that amount of time work on school. Giving myself a time limit and that pressure helps me focus and get something done as quickly as possible. Incentives are also an effective way to urge myself to do something I do not want to do or need to get done.

As I approach my career, and go through the schooling to get there, I want to keep in mind my goals and strategies. I want to be mindful of my time management. There are constant distractions that will pull me in all directions, and implementing my techniques of how to combat distractions early on will help me in the future. I want to try time blocking as a way of organization for my daily life. While it does not have to be exact times, I want to ensure I have my time of academics or work, a social life, and of course time to treat myself and rest. Having a consistent routine is essential for me to not get stressed and function at my highest capability. Additionally

having a community of people is essential for me. In my mind people equal opportunities, whether it is an opportunity for a friendship or employer, the more people you know the more the chances of opportunities. The book mentions soft skills, one skill being holding conversations. Being able to hold an intellectual conversation will allow for people to see your intelligence in your field of expertise. The book also mentions will power, as what “gives you the self-control to make the right decision, even when it’s not the easy one.” The concept of willpower being limited and running dry is thoroughly explained as what can cause negative behavior. I am hoping I can find my limits and work to achieve my potential to build a successful career.