

Final Reflection on My 2024 Summer Enrichment Experience at the University of Chicago Summer Immersion Program

By Evan Wiggs

I enjoyed each and every day at the University of Chicago Summer Session. Academically, the program was very insightful to the area topic I believed I wanted to study. Going into the program, my number one concern was the group final project. I was worried that there would be an unbalanced workload and/or other group members not putting in the work. I soon found out that my worries were pointless, as all members of my final group project significantly aided to improve the quality of the presentation. From this, I have learned that in future scientific studies, I will take on group projects with ease, and not with the bad reputation that they have previously gained.

During the program, I had to adjust to the level of feedback from my TA. On the homework assignments, there was an extreme level of detail orientation that I quickly had to adjust to. As for the rigor of the course, I didn't think that the course was too hard. I had previously self-studied astrophysics, so I imagine I was more familiar with the content than other students. The coding portion of the class proved to be the most tedious and difficult part of the entire class. It followed similarly with the feedback, such that it was extremely focused on detail. If a comma was missing, the entire block of code could throw an error message.

At this course, I quickly fell in love with the content that was being taught. It covered a wide variety of topics, but considered each topic with a deep level of investigation and problem-solving. Some topics in this course were, spectra, electromagnetics, stellar evolution, quantum mechanics, nuclear physics, galaxies, and black holes. I could tell early on that the expectations of the program were significantly higher than anything I had done in high school. I expected this and looked forward to the level of difficulty, as I had not received that in a high school environment.

The homework was more thought provoking and the instructors adapted a mindset of teaching that elicited a "progressive struggle". In short periods of time, there really wasn't too much work to be done; I spent roughly 1.5 hours on homework each night followed by studying for various times. Most of the assignments were thorough and long, but the program compensated that with extended time frames to complete them.

My class didn't really get to do many labs. On the first day we had a solar flux lab, where we went outside and measured the energy output of the sun, but all of the other "labs" were coding assignments. I would say compared to other students in the course, I was more prepared. In the coding aspect, it was a fairly even playing ground, but the actual astrophysics portion was more stratified. I had previously self-studied astrophysics so I was familiar with the concepts presented. That being said, the course pushed my understanding of these concepts

into greater regions. I was able to cross connect different topics within each other because of the level of understanding I had gained from the course.

My greatest accomplishment during the program was the final project. It was no doubt the most enriching part of the academic experience. It took a team of highly devoted students and multiple hours of work to finish all the research and coding for this project. My greatest learning experience was the coding portions of the assignments. With no previous experience of coding, I had to spend extra time trying to figure out the formatting of the python program.

The faculty members at the UChicago Summer Session were outstanding. My professors were truly understanding in everything they did. They definitely went out of their way to ensure that top notch learning was taking place at a high caliber. The RAs also added to the fun of the summer program. They formed connections with the students during the House Games.

One of the greatest highlights of the summer session was the people. I quickly learned how diverse the community was at UChicago. Roughly 50% of the attending students were international. Nonetheless, I created a group of friends that meant so much to me. They really were the highlight of my trip. We all learned about each other's cultures and normalities from where they came from. In doing so, bonds were strengthened greatly. The friends I made at this program impacted my life so much, and I still talk to them after the program has ended.

I think I was relatively prepared to live on campus away from my parents. I have always liked the idea of college, so living by myself wasn't really a challenge for me. The community in the dorms definitely helped get rid of the nerves for being there. One challenge did prevail on the campus, aside from the dining hall, there was limited access to food. Most of the restaurants required a lengthy walk to get to.

Being in a residence hall was one of the best parts of the experience. There was never a dull moment; I had other students playing music in the elevators and selling cookies to me. The atmosphere was so fun at all times there. I really enjoyed the setting of the program. Campus is on the southern end of Chicago, so there wasn't too much traffic or noise. That said, the beach was about a 10-minute walk, and an uber could get students to downtown Chicago in about 15 minutes. The city was very accessible, which added to the experience.

I would 100% recommend this program to other GFF students because it really exceeds all expectations. The University of Chicago adopts a work hard play hard motto, and it shows even through their summer programs. This program definitely changed my academic path for the better. I have decided that the University of Chicago is my number one college pick. Also, through class lectures, I discovered my passion for my future specialization in quantum astrophysics. I still intend to receive my doctorate and become a full-time faculty member at a university.

Personally, this program extended my conscious thinking to an international level. It's hard to imagine people on the other side of the world having the same interests as you, but I quickly

found myself mistaken. My best friend from the program is on the other side of the world right now, but we both love physics, and he introduced me to a new passion for scientific philosophy. The program was a huge culture shock, but I am glad that it turned out that way. I believe that from this program, I found a new appreciation for intense academics and the community that comes with them.

Overall, I would recommend this program to anyone who has even a remote interest in pursuing high level academics. The sense of community was enriching in every way. I am beyond grateful to the GFF for allowing me to have this opportunity, and it has helped me in my decision making for my future. The memories gained at the UChicago summer session will be a part of me for the rest of my life.