Student Impact Testimonials

Jacob, 12th grade

My name is Jacob and I am a senior in the Computer Science II: Functional Languages and Computer Organization course this year. This is the first of my four years at Gann Academy that I am taking a Computer Science course. In the past, a Computer Science course was offered but unfortunately did not fit into my schedule. This year, many new Computer Science were added to the schedule as the school established its Computer Design & Fabrication Department, and I am grateful that I was able to integrate the new Computer Science II course into my schedule. The Computer Science II course has been one of my favorite classes in my time at Gann because it challenges me in ways that no other course has. The course has been a fast-paced advanced programming class of students building on previous Computer Science experience. The first semester, we have been learning a functional programming language called OCAML. Learning OCAML has been a very fascinating experience because I have only ever encountered imperative programming. Functional programming is interesting because it requires different logic from imperative programming and has inspired me to think in new ways to complete programming challenges. Thus far, we have used OCAML for a few projects. The first major project of the year was to create a program that modeled the Enigma Machine that was used in World War II to encrypt messages. The program would take a series of characters as an input, and then map each character through a system of rotors and a reflector to create an encrypted message as the output. The second project of the year was to create a text adventure game engine. A user could create a game including multiple points and items and a point system that could be played in the engine. At the end of the project, a few students from the class presented their solutions to the game engine and it seemed as if each student had solved their engine in their innovative and different way. We were able to learn from and challenge each others' code, and discuss possible concepts that could be implemented to create more efficient programs. Currently we are working on a Search Engine that can read through .txt files in a given directory and determine which files contain specific keywords. The Search Engine we are working on uses an innovative way of storing data that is used in professionally designed programs to maximize search speed and efficiency. Programming the Search Engine has been a cool experience because we have been able to learn and implement amazing concepts with practical applications. As a programmer for Gann Academy's Robotics team, the Computer Science II class has been excellent because I have been exposed to programming concepts that can be used in Robotics applications. The exciting challenge that Computer Science II has been helped cement my decision to major in Computer Science next year in college.

Emma, 10th grade

I was initially interested in computer science because I heard that it was the "future", but I did not really understand why. However, after my first few months of taking CS1 I can say that I am just beginning to understand how much is possible with coding. Through coding, we can solve math problems, create games, teach others, and learn in new ways. I definitely plan on taking CS2 next year.

Shayna, 11th grade

I was apprehensive to say the least to sign up for a physics module. I was in the middle of my sophomore year and searching for another class to take during my free block. I have never pinned myself as a "Physics kid," but I was interested in other areas of STEM and, seeing as this class happened to be the only STEM module available for me, I signed up. I was quite nervous seeing as I had never really taken a higher-level physics class, but after only one class, I realized there was nothing to be scared about. Chris showed me (and my fellow peers) that physics could not only be interesting, but easy to digest as well. He offered us just enough guidance in the material so that we could go off easily understand the rest, completing labs and assignments by ourselves, for the most part. Optics, for me, was a very engaging class, one in which I not only learned a ton about how light and sight really works, but also one that made me reconsider my distaste for physics as a science.

And so, this year, there was no question in my mind that I wanted to sign up for Chris's Quantum and Nuclear Physics module. While the course is not over yet, as of now I've fully been enjoying my time in the class and have learned so much about how and where physics and chemistry (the branch of science that I happen to be very interested in) overlap. It's been quite an engaging class and I always find myself excited for class. Honestly, one of my favorite things about the class is how excited Chris gets by the material. I can truly tell that he loves the material he's teaching and is really eager to explain to his students the wonders of the quantum and nuclear world. I'm fairly certain that I'll be signing up for Chris's physics module next semester and can't wait to see more of how interesting and engaging physics can truly be.

Ben, 11th grade

Over the past two years, I've taken every opportunity to join Chris's physics enrichment modules, which have proved to be equal parts fun and educational. The first module I took was Thermodynamics. Along with a handful of peers, I quickly gained a firm grip on the course's material, through Chris's three-pronged approach: explaining key concepts and principles, teaching the equations that mathematically represent and explain them, and exploring with hands-on proof. After a semester of learning the key concepts of basic thermodynamics (including the four laws and beyond), various equations (which I still toy with in my head to explain simple phenomena in the world around me), and exploring with basic calorimeters and metal rods of varying conductivities, I was eager for more. Thus, I signed up for every module Chris offered afterwards, including courses on Electricity and Magnetism, Optics, and Quantum and Nuclear Mechanics. In addition to enriching my STEM education and helping me attain basic proficiency in several areas of physics, these courses have taught me to thoroughly enjoy class material, making Chris's physics modules a class I look forward to every Tuesday and Friday. Overall, Chris has galvanized the enthusiasm and curiosity of my peers and me through these opportunities to explore material in high-level physics and to consequently develop essential life skills, such as critical thinking.

Alex, 11th grade

My name is Alex Bulanov, and I am a student at Gann Academy. Chris has been my teacher for numerous STEM based classes. Last year Chris taught be Electricity and Magnetism and Optics. I am currently studying Quantum and Nuclear Physics with Chris, and next semester he is teaching me Thermodynamics. As well as these science classes, I am also in Chris's Computer Science class. We are studying the functional programming language OCaml. Chris is a fun, enthusiastic, and engaging teacher. He has been doing an incredible job at pushing Gann's innovation in the STEM department for many times as long as I have been his pupil.

Marissa, 9th grade

One of the main reasons why I came to Gann was because of the science program. When I got to school, I was so impressed that freshman could take such advanced sciences. I chose to take quantum and nuclear physics because it seemed like the coolest way I could possibly spend the module block. It's so nice to be able to take a science module in addition to my regular 9th grade physics course.

Liora, 11th grade

I decided to take the physics modules because the freshman physics course was really interesting to me, as what I learned could be seen directly in my own life, but the curriculum didn't offer the kind of deeper understanding of the concepts that engaged me. What I like about the modules is that they significantly expand on the fundamentals taught in the freshman class, but still teach ideas that I can recognize in the real world. Though the class is only taught twice a week, making it difficult to gain a comprehensive knowledge as quickly as would be possible in a full course, the time is used efficiently, and I always feel like I am learning. The difficulty of the module itself has fostered a safe community for learning, because everyone involved is a part of the class by choice.