

Over the past four years, I have had the opportunity to both challenge myself and expand my skills in biomedical art through Honors courses and alternate course experiences. Starting in my freshman year with Introduction to Figure Anatomy for the Artist and ending with my winter term study abroad to Prague, I have continued to take advantage of all that the Rowan Honors program has to offer which has helped me become a better student, better artist, and better prepared for life after college.

In the spring semester of my freshman year, I took the course *Honors Introduction to Figure Anatomy for the Artist* with Professor Ethan Geehr. Despite being modified due to COVID-19 restrictions, using digital body models instead of going to a cadaver lab and having less interaction due to the pandemic, this course provided me with a strong foundation in understanding human anatomy, proportions, and figure drawing. These skills are critical in biomedical art for creating realistic and accurate illustrations. As an Honors student, I was pushed to learn a wider variety of anatomy and create additional drawings of joints and hand muscles, both of which prepared me for future anatomy classes and expanded my portfolio of work. The figure drawing portion of this course was an essential foundation for all other biomedical art courses I took during my time at Rowan - this type of gestural and quick drawing teaches unique skills in observation, representation, and movement that supports all the work I do. With a live model, I drew poses in increments of fifteen seconds, thirty seconds, one minute, five minutes, and twenty minutes. These different increments allowed me to learn how to train my eye to see the basic forms of human anatomy and then spend time to capture the nuances of the light and form.

The following semester, the fall of my sophomore year, I took *Honors Introduction to 3D Modeling* with Professor Amanda Almon. Moving from 2D to 3D is a huge step in visualization techniques, and requires a lot of patience and determination to fully grasp. The software is complex, and creating a three dimensional object on a two dimensional space (a computer screen) takes practice and a new way of thinking of three dimensional space. I learned industry standard tools such as Autodesk 3D Studio Max and Autodesk Mudbox to create detailed models of the natural world, including a lab setup for anaerobic gut fungi research and a Texas horned lizard. These 3D skills are highly valuable in career fields such as animation, virtual reality, and publishing. Beyond the classroom, the work I created in this course helped me apply and receive scholarships through the Guild of Natural Science Illustrators, who now display my 3D model of a research lab I made in 3D Studio Max on their website, and are essential parts of my portfolio. I was able to take these 3D skills I developed in this course throughout my college experience when taking 3D animation my senior year, which built upon my modeling skills to animate the things I create, which is another skill highly sought after by employers. Beyond technical skills, 3D modeling taught me patience, dedication, and problem solving, something that I will use for the rest of my life. For the lab model, this kind of research had never been visualized before in illustrations or photographs, so I had to work very closely with the researcher at Oklahoma State to ensure accuracy of equipment and procedures.

Over the summer between my sophomore and junior year, I interned at Stantec Philadelphia and used this opportunity as an Alternate Course Experience (ACE). Throughout this internship, I learned technical skills such as Autodesk Revit and Enscape, Adobe InDesign, and file management systems such as BIM 360. I worked on real projects including interior graphics and

designs for an elementary school in the Philadelphia School District where I created renderings, drawings, and walk-through animations to display the concept and designs. I also worked with other interns in the Philadelphia office and across the country to create architectural ideas and plans for a non-profit organization in North Carolina who provides a farmstead environment, summer camps, and vocational training for people with Autism Spectrum Disorder (ASD). We focused heavily on learning about the design needs of people with ASD and how to accommodate individual sensitivities to stimuli. These design considerations included everything from custom adjustable lighting, smooth transitions between spaces, and elements that reduce external stimuli like sound or smell. For this project, I created the presentations, designed the final booklet that was given to the client, and worked with another intern to create the landscape design and walk-through animations. Throughout this internship, I received real-world exposure to graphic design in a professional setting, collaborated on large-scale projects, and created many visual assets, all of which supported and expanded upon what I learned in the classroom at Rowan.

Some of the best experiences I have had in college were through my two winter term study abroad experiences in the Galapagos and Prague. While very different from each other, they both gave me cultural and educational opportunities that went far beyond what I could learn in a classroom. In the Galapagos, I explored extremely unique habitats, endemic species, and learned about a different culture through a homestay with a local family on the islands. While saying this feels a bit cliché, the experience was truly life changing and influenced my decision to apply to a Fulbright to Ecuador and potentially grad school at the school I did my study abroad through, the Universidad San Francisco de Quito. I made lifelong friends and connections while learning first-hand the need for conservation action around the world to protect the fragile yet critical ecosystems. The Galapagos Islands was the birthplace of Darwin's theory of evolution, and continues to be a critical area for scientific research and discovery. Everything from climate change to speciation to the effect of tourism on the local economy and environment is studied here. While this short-term study abroad was not equivalent to a full ACE credit, I am very grateful for the Honors program helping me fund the study abroad program, something that I could not have done on my own.

During my senior year, I had the opportunity to go abroad again for three weeks to Prague, Czech Republic to study the art and architecture of the city throughout history. Not only did this fulfill my art history course requirement, it also introduced me to a culture and a country that I knew very little about prior to going. With a professor who was born and raised in Prague, I learned far more than just art history but about the complex history of the Czech Republic and the influences on their history on their modern cultural identity. The professor grew up in a period of communism in the Czech Republic, which greatly shaped his future decisions to study in the United States and elsewhere in Europe to gain additional perspectives that were restricted during communism. The Czech Republic's geographic location in the center of Europe also made it a unique blend of cultures, languages, and people in its early history, as demonstrated by the artistic influences of German, Austrian, Italian, French, and Byzantine styles. In just three short weeks I learned about the history of art and architecture in the Czech area from ancient Rome to today. This experiential learning allowed me to see works of art I have read about in books and talked about in classes. As with my study abroad to the Galapagos, the Honors program helped me financially with a stipend that I am extremely grateful for.

The Honors courses I have taken have been deeply embedded in my college experience and have greatly enhanced my education. Through gaining a strong foundation in illustration to expanding my technical knowledge to having meaningful cross-cultural opportunities, Honors courses have provided me with personal and professional skills that cannot be learned in a traditional college setting.