Natalie Horton

Andy Long

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<p align="center">Mathematics Project</p>

Like most students on the liberal arts track, math has never been my forté. Numbers, equations, and formulas have always felt somewhat foreign to me, more like a second language I was never fluent in than a familiar tool. I have not taken a formal math course since my senior year of high school, so when I first glanced at the syllabus for this semester, the material felt insurmountably daunting. The mere thought of diving back into mathematics after such a long hiatus brought on a wave of anxiety and self-doubt. I fully expected to spend the semester treading water, simply trying to keep my head above the flood of unfamiliar concepts.

Despite my initial reservations, however, I found myself genuinely enjoying certain topics we explored throughout the course. Surprisingly, some of the material even resonated with me on a deeper level than I anticipated. One of our most recent focuses, toroidal knots and links, has been by far my favorite. I was fascinated by the way complex mathematical concepts could take on such visually interesting and almost artistic forms. Knots, with their intricate twists and loops, seemed to bridge the gap between the abstract world of mathematics and the creative realm I feel at home in.

On paper, I am a graphic design student, enrolled in the BA program. However, my ultimate career aspirations lie elsewhere. Illustration is my true passion; I intend to pursue a career in character concept design for animation, crafting the visual identities of characters before they come to life on screen. Because of this, I saw an opportunity to incorporate my

artistic interests into this project in a way that felt authentic and meaningful to me. Rather than approaching the project with a purely academic mindset, I decided to dip my toes into the medium of animation, an area much closer to my heart.

For my final project, I created a short animation, a little over a minute long, that visually depicts the main knots and links we spent time learning about during the semester. Among those featured are the unlink, the unknot, the Hopf link, the trefoil knot, Solomon's "knot," the figure-8 knot, the cinqfoil, the double figure-8 knot, and the Borromean rings. Each of these knots and links appears in the animation in a way that highlights their unique structure and characteristics, attempting to make the abstract shapes a bit more tangible and understandable to a visual learner like myself.

I approached the project as if it were intended to serve as an overview or introduction to these concepts—something a teacher might use before launching into a more detailed, technical lesson. My goal was to capture the essential qualities of each knot and link while presenting them in a way that was accessible, engaging, and visually appealing. Rather than focusing solely on technical accuracy, I tried to infuse the animation with a sense of rhythm and flow, so that even someone encountering these ideas for the first time could appreciate their elegance.