

Teaching Reflections - CIS 325 Data Analytics and Visualization

CIS 325 is a 3-credit course that was design by me and offered for the first time in Spring 2021. This is an elective course geared towards juniors/seniors in Computer Science and other majors. This course covers the principles of processing, analyzing and visualizing data and brings in the latest advances in the field. This course is a core elective for Data Analytics track that will be offered in the BS program upon approval from SUNY office.

In designing this course, I aimed to make it attractive for a broad range of students, beyond computer science, who could benefit from a background in data analytics. As students from programs such as Biology and Chemistry would have minimal programming experience, I tailored the course to be based on usage of available tools for data analytics and the learning to be project-based. This design, while benefiting students from non-CS majors, was, however, not as satisfactory for CS majors.

One common concern for students in the first offering was the lack of textbook for the course. Given the tremendous growth of the field in the last few years, it is expected that acceptable textbooks will be available soon, but this is unfortunately not the case right now. To address the immediate need I will be publishing background material as reference text so students have detailed material to fall back on for out-of-class reading. I'll also work with the curriculum committee to see if there's an opportunity to create a dual numbered course that will allow me to create a more rigorous course for computer science, by tailoring the assignments and project requirements appropriately, while leaving the course accessible to the broad student body.