

BSIS Program Review

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LIS: 4934 Senior Capstone

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Introduction

I am set to graduate this spring 2024 from USF with a BSIS. I transferred from studying computer science at KSU to studying information science at USF. I originally chose the data science concentration, but switched to the web development concentration after I realized my graduation would be delayed by a semester if I chose to stay in data science. I have an interest in both data science as well as web development. I intended to graduate as soon as possible, so I chose web development.

Core Courses

There were 6 courses that were considered the core of the degree. Professional Writing (ENC 3250) discussed how to communicate in a professional work environment which was highly relevant and useful. Introduction to Information Science (LIS 3261) discussed the basics of information science such as information science research, information behavior, human-computer interaction, information technology, as well as library services. Information Technology Concepts (LIS 3353) discussed basic information technology concepts, history, and current job market. Information Behaviors (LIS 4204) discusses the history of information behavior research, theory, current state and future of the field. Information Policy and Ethics (LIS 4414) discussed the current state and history of IPE law. BSIS Senior Capstone (LIS 4934) discusses the degree experience as well as compiles a portfolio.

Core Courses Experience

Information behaviors, although interesting, did not seem relevant to web development besides the human-computer interaction section. Information Policy and Ethics was one of the more difficult courses, but it remained highly relevant by discussing current IPE events like autonomous vehicles. The introductory courses were useful in introducing the student to concepts but lacked practicality to me. Professional Writing was useful in teaching corporate communication. The Senior Capstone has been useful in developing a portfolio and reviewing my experience with the degree. Both of these have been highly relevant.

Concentration Courses

There were 6 courses I took that were included in the web development concentration section of the degree. Principles of Information Security (CIS 3360) discussed some basic cybersecurity principles which were useful to know such as HTTPS, but I wish it went more in depth on practical measures to take such as auditing and testing.

Networks and Communication (LIS 4482) discussed the basics of how databases and networks work which was useful to understand but less useful in the sense of building websites. Information Architecture (LIS 3783) discussed the design of webpages and the utility of good design. Interaction Design (LIS 3352) discussed the basics of human computer interaction as well as the usability of specific GUI. Web Design Technologies (LIS 4365) discussed html, css, javascript, and ftp. World Wide Web Page Design and Management (LIS 3361) elaborated with php, mysql, and file management.

Concentration Courses Experience

I believe the most relevant information I learned to web development came from creating wireframes in Information Architecture, discussing the utility of GUI in Interaction Design, and building a website in Web Design Technologies as well as World Wide Web Page Design. The two coding based classes had almost identical content, so I suggest just combining the courses into one or going in more depth in the advanced course. I also wish there was more of an emphasis on designing websites with wireframes and getting feedback on individual designs. The only course that offers this is Information Architecture, so I suggest adding additional courses that emphasize this. Another issue present is the lack of choice in instructors as many of the courses only offer a single instructor which can result in a poor experience if the instructor is not particularly interested in the subject they were assigned to teach.

Miscellaneous Upper Courses and Experience

I took 1 upper level course at USF for the data science concentration before switching to the web development concentration. This was Advances Statistics and Analytics (LIS 4273) which discussed advanced statistical theory such as bayesian statistics and regression analysis. This course was highly relevant to data science and less relevant to web development. I also took 2 upper level courses at KSU as a part of my computer science degree before transferring to USF. These courses were Computer Application of Statistics (CGS 3505) and Computer Organization and Architecture (CGS 3503). The first course discussed statistical software such as R and Python which was highly relevant to data science. The latter course discussed the theory of how computers work

and are designed including circuit design theory. This course was interesting but not relevant for the work of web development or data science.

Conclusion

As a student of information science interested in becoming a web developer or data scientist, the degree has been a source of relevant knowledge. I have learned how to design websites using wireframes and build them using code. I also learned about statistics and how to analyze data using statistical software. I learned how to communicate in a professional work environment, as well as discuss important things. I learned how to write and document effectively. Overall I learned many things from my experiences in college, and I hope to use this knowledge to help my work as a web developer or data scientist in the future.