

CS460

Senior Capstone

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For my senior capstone project, I am proposing a web-based tool that can be used by the Non-Traditional Program office to determine which classes fulfill specific degree requirements, based upon the offerings of WVUP.

Currently, in the Non-Traditional Program(NTP), A great deal of staff time is spent evaluating which currently offered classes are relevant to each student, based upon the individual student's transcript. There is currently no way to retrieve a list of classes that fulfill one or more degree requirements, short of looking at each class, comparing it against a list (or having to go look up information on that class), and then comparing it against the student's needs.

My proposal is to create a web-based tool that stores each class offered by WVUP, and the degree requirements that it fulfills (for example, ENG 403 fulfills 3 hours of General Education, Higher Education, English and Humanities. ) This tool will allow NTP staff and students an easy way to determine which classes are relevant and open, and allows them to easily find classes to fulfill their degree requirements.

This tool would, minimally involve a web server, a data retrieval and transformation tool, a backing database, and two simple web clients, one for defining class requirements, and one for displaying the outcome of the calculations. Possible extensions to this tool could involve a mobile app, integration with student transcripts, and UI refinements to make it visually appealing, instead of merely functional.

This project would involve a representative from the NTP office, it would also involve interacting with WVUP's IS&T or Records office (to access student records and

offered classes). A server would need to be given access to some sensitive information, so the university's security policies would have to be taken into account.