

CSCI 480: Capstone 1

Senior Project Early-Proposal Template

This template provides preliminary information necessary for the faculty and students to evaluate your proposal. Copy and complete this document. Submit shared link in Moodle assignment.

Name:	Ben Lynch
Project Working Title:	UNCA Transfer Equivalency Tool
Last Modified Date:	

1.)	<p>Briefly describe your tool, application, product to be developed, or problem to solve (executive summary):</p> <ul style="list-style-type: none">• Website for UNCA transfer credits.• Users manually enter courses using a search/dropdown menu where users can only add a class that is in the system. NC CC, NC College -> college, OOS School -> school, Military -> institution.• As the user adds each class, it builds their virtual transcript in the tool.• When they are finished adding all their classes to their virtual transcript, the tool returns a list of what each class transfers as(some may have multiple transfer options) and which core requirements they fulfill, along with any associated notes.• The results will also include a list of core requirements met and still needed (ex Humanities, Arts, etc).• This website will be only for the current data on UNCA's transfer equivalency tool, it will not automatically update due to Registrar data protection.• This tool differs from UNCA's current tool because it allows the user to build a virtual transcript and see all their equivalencies together as well as the core requirement satisfactions. The current tool only lets the user check one class at a time.
2.)	<p>Place your background and literature review here:</p> <p>I have already gathered my json data from the UNCA transfer equivalency tool and started building my database.</p>
3.)	<p>What does the product do? Give the "input" and "output":</p> <p>This was described in section 1.</p>

4.)	<p>List your current ideas on how to develop the project:</p> <p>Front end: React (via Create React App or Vite). TailwindCSS or Ant Design for styling.</p> <p>Back end: FastAPI.</p> <p>Database: PostgreSQL (via DBeaver)</p> <p>How they work together: React fetches data from FastAPI. FastAPI queries your PostgreSQL. Results show instantly in React tables / lists.</p>
5.)	<p>What are your final deliverables?</p> <p>A website that lets a user use the transfer equivalency tool.</p>
6.)	<p>What hardware do you require?</p> <p>I don't believe I need any additional hardware besides my laptop.</p>
7.)	<p>What software do you require?</p> <p>DBeaver, VSCode, and maybe a server for my database</p>
8.)	<p>What are your plans to demonstrate your project works? (demo, user studies, formal experiments, etc):</p> <p>I will demonstrate using my tool by adding classes and showing the results. The Registrar's office said they could provide sample transcripts with student information black out. I could even ask for a volunteer to use the tool with one of the provided transcripts.</p>

