

CS 4100, Fall 2022

Topic Proposal Guidelines

No two students may work on *exactly* the same topic. Initiate a “claim” to a topic by uploading your topic proposal to the homework submission system no later than **Friday, September 9th**. Below are format guidelines:

<Your Name>

CS 4100

<Date>

Topic Proposal

<Working Title>

First paragraph: describe your proposed topic.

Second paragraph: discuss which issues you intend to address and emphasize and what you intend to leave out and why.

Additional paragraphs as necessary.

Provide a list of tentative sources in APA format. You must have at least four sources and they must be reliable (peer reviewed, edited, or primary). Sources **not** allowed include (but are not limited to) blogs, Wikipedia, stackoverflow, and similar sites. Acceptable references are required.

<https://library.csustan.edu/computerscience/citation>

To continue in this course I approve your proposal; I may ask you for one or more revisions along the way. Students may have similar, but not identical topics, I reserve the right to make that determination. Topics will be assigned on a first-come-first-served basis. Submit your topic proposal no later than **Friday, September 9th**.

Approaches to topic selection:

1. Start with a problem and look at which languages (often special purpose) are used to solve the problem. Consider the design choices made to facilitate solving this type of problem. Some examples might include graphics, teaching, robotics, or mobile devices.
2. Look at how an interesting aspect of programming languages is treated differently in different languages. Some examples could include, data sharing, parameter passing, typing, or scope.
3. Look in depth at a programming paradigm, for example logic or rule based languages, describe the design choices and the types of problems for which it is well suited.

Some topics that are **not** allowed:

1. Something that is too broad. For example, programming languages for AI. Instead narrow to a specific subfield of AI, such as planning, knowledge bases, robotics, natural language processing, etc.
2. An overview of a single language. To get depth you will need to compare and contrast, so you will need to discuss more than one language.