

Project proposal

Editable template / due October 28

Name: [your name]

Topic: [A–F or approved alternative]

Working title: [a question-specific title]

Replace bracketed prompts with your content. Target 1–2 pages. This template is optional; the requested information is not. A proof of concept is required.

1. Question and significance

What specifically will you compare, derive, predict, or explain? Why does it illuminate mechanics?

2. Model, data, and assumptions

State the system, variables, parameters, initial/boundary data, and what is held fixed across comparisons. Identify the source topic and any proposed change.

3. Required foundation

What baseline result must work before the investigation begins? What can you already use from the course, and what needs review?

4. Proof of concept

Insert one preliminary derivation, verified limiting case, diagnostic figure, or explicit example. Say what you checked and what it demonstrates. “I plan to code it” is not a result.

Project proposal, continued

A focused and revisable research contract

5. Investigation and method

Describe the bounded comparison or development beyond the baseline. Choose one branch where the topic offers alternatives.

6. Evidence and validation

What would support or refute your central expectation? Name a check that is meaningfully independent of the main calculation.

7. Minimum complete project / stopping rule

State what completed work would answer the scoped question. Avoid “fully understand” or “explore everything.”

8. Schedule, obstacle, and fallback

State the next concrete task, the main risk, and what you would simplify if progress stalls.

9. Anticipated tools, sources, and optional stretch

List expected analytical, computational, literature, and AI tools. Identify one stretch goal only if useful; it is not part of the completion requirement.

After instructor feedback: record the approved question and stopping rule, and briefly explain any major revision. Do not silently change the project contract.

Due 11:59 PM, New York time on October 28. Submit as a PDF in Brightspace.