



## **Mock Tea Study Grant Proposal Assignment (+AI Engagement)**

**Lesson Plan:** Mock Tea Study Grant Proposal Assignment (+AI Engagement)

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## **Mock Tea Study Grant Proposal Assignment (+AI Engagement)**

### **Target Audience:**

Undergraduate students, Graduate students, Junior scholars and researchers

### **Duration:**

One academic quarter or semester.

### **Learning Objectives:**

1. Refine research topics
2. Develop grant writing skills
3. Develop vocabulary related to funding applications

4. Develop library research and online database search skills
5. Articulate methods and outcomes
6. Develop budgeting and research phase development skills
7. Engage with generative AI such as ChatGPT
8. Make a conscious and critical use of AI technology

### **Background Information for Instructors:**

In my course on "Global Tea Culture and Science," in lieu of a final paper or final exam, students submit a mock grant proposal as their Final Project for the course, which comprises 30% of their final grade. This includes 5% for each of two checkpoints, outlined below, and 20% for the final project itself, which is turned in at the end of the quarter. (The remaining 70% of the final grade consists of weekly reports on class readings, materials, and lectures. Students are also required to submit their own "questions for possible future research" at the end of each weekly report, based on the course content for the week.)

The prompt for the Final Project can vary depending on how specific the instructor wishes the topics for the final project to be. Students in the "Global Tea Culture and Science" course are given the following instructions:

*Imagine that the UC Davis Global Tea Institute is offering a summer scholarship for students to conduct research projects related to tea. The application consists of a five-page (1000–1500 words) statement in which you outline your project and explain why you should be awarded a scholarship. Provide background and scholarly context for your project, explain your methodology, and delineate your goals and expected outcomes.*

*Be sure your final submission aligns with the Final Project Grading Criteria listed below. Your experience generating thoughtful questions about the lectures and readings for each week, as well as your weekly*

*papers about the subjects covered in the course (including those at the GTI Colloquium), will help you frame your final project.*

*If you have submitted well-developed questions as part of your weekly assignments, you will have a good foundation for this assignment. Think back to what questions you have raised in your own mind for this class. Your final project proposal is more of an expansion of one of these questions, rather than an answer to it. Through the process of researching the established literature, and then describing your own methods and goals, you are exploring what it would REALLY take to tackle your proposed question.*

*There are many guides to writing research proposals, including YouTube videos for those of you who are more visually/aurally oriented. This straightforward guide has many good pieces of advice to follow:*

*<http://libguides.usc.edu/writingguide/researchproposal>*

*You might also benefit from a consultation with a librarian, or with the faculty member working most closely on your proposed topic. Those of you who find writing difficult should compose a draft, and then make an appointment at the writing center on campus to review your draft:*

*<http://success.ucdavis.edu/services/writing.html>*

## **Notes:**

I generally have one dedicated session early in the quarter in which we go over the Final Project Guidelines, discuss the XYZ strategy outlined below, and have a brainstorming session in groups with feedback from the group and the instructor.

## Dates and Deadlines:

**Checkpoint #1: Topic submission (a little more than halfway through the quarter or semester).**

*Checkpoint #1: Topic submission. Your topic submission should be comprised of 1) What you propose to research in general, and what specific research question you will address; 2) The significance of this research; 3) How you might go about conducting your research; and 4) two or three preliminary sources. You don't need to read these sources thoroughly, but you do need to have enough of an idea about them that you think they will be useful to your research topic.*

*One useful way to brainstorm and frame your topic is by crafting a "motivating research question" by following the XYZ formula: "I am studying **X (specific topic)** because I want to research **Y (motivating question)**, in order to help my readers understand **Z (significance)**." Double-check that your statement makes sense when you test it by reframing it as: "If I want to help my readers understand **Z (significance)**, can I do it by researching **Y (motivating question)**?"*

*Example: "I am studying [X=tea packaging practices] because I want to find out [Y=how packaging can be improved for preserving tea flavor and shelf life] in order to help my readers understand [Z=how packaging affects consumer enjoyment of tea]."*

*Reframed as: "If I want to help my readers understand [Z=how packaging affects consumer enjoyment of tea], can I do it by researching [Y=how packaging can be improved for preserving tea flavor and shelf life?]."*

*Adapted from Part II, Ch.3 & Ch.4 of The Craft of Research. For further detail see:*

*Wayne C. Booth, et al. The Craft of Research (4<sup>th</sup> edition). Chicago:*

*University of Chicago Press, 2016. Also available as a pdf here:*

*<https://docplayer.net/5904396-The-craft-of-research.html>*

## **Notes:**

At this point, most students need advising to distinguish background information from basic research literature, and they often submit the former instead of the latter as their preliminary sources. Most students have had no experience with writing a research proposal and are stuck in a kind of "high-school book report" mode. It should be noted that the XYZ example is still far too general to encompass a research topic (as are the AI examples noted at the end). This, however, is a first opportunity to get them to think about "going down rabbit holes" on almost anything to get to a topic specific enough that a global search of scholarly books and articles will yield 20–99 results. Fewer hits would be too specific; more than 99 is too general. Here the instructor can also point out that at an institution of higher learning, there's literally millions of dollars of published research at their disposal. Many, if not most, of the submissions will need extensive revision before going on to the next step, so this step is labor-intensive for the instructor.

**Checkpoint #2: Outline and annotated bibliography (two or three weeks after Checkpoint #1, depending on student revisions and instructor advising).**

*Checkpoint #2: Outline and annotated bibliography. Submit a one-page outline of your proposal, using full sentences for your major headings. Following the rubric below, your outline should include Background & Significance, Method & Aims, and Expected Outcomes. Your outline should be followed by a list of **at least** three sources. Annotate **exactly three** of these by writing 2–3 sentences on how the source will be useful to your*

project.

### Notes:

The more conscientious the instructor has been for Checkpoint #1, the easier Checkpoint #2 will be. At this step, there is still an opportunity to steer the student toward a more refined or realistic topic for the grant proposal.

**Final project deadline (due at the last class session, or during final exam week, depending on if the assignment is in lieu of a final paper, final exam, or both).**

*Submit your 1000–1500 word project on Canvas before midnight. Early submissions are welcome. Late submissions will not be accepted unless you provide a documented reason or have arranged a different submission date with your instructor of record ahead of time. Final Projects will be graded in accordance with the criteria below.*

Criterion	Possible Points	Actual
Title of Project & Word Count	5	
Your Name & Affiliation	5	
Your Qualifications	5	
Abstract	15	
Intro: Background & Significance	20	
Methods & Aims	20	
Expected Outcomes	20	
References	10	
Total:	100	

*Each paper will be graded on a 100-point scale according to the above rubric. Please be sure your **sections are labeled clearly**. Because your abstract is a summary of the entire project, it is generally good practice to write it at the end, after you have completed the other sections. The word-*

*count limitation means that each section will likely be comprised of one concise paragraph.*

*Proficiency, originality, and persuasiveness are three important elements of a successful proposal. These characteristics are on display when 1) you show an understanding of source materials, 2) you accurately summarize established opinions, and 3) you eloquently present what is new about your own ideas or approach.*

*Please be sure to check that you have completed all the items on the criteria checklist, **including your name, word-count, and the title of your project.** Confirm that your word-count is within the 1000–1500-word range. The word-count includes everything in your proposal, from your title through all concluding references.*

***Students who submit AI-generated work as their own will be reported to Student Judiciary Affairs and may be subject to dismissal from the university.***

Note on AI usage: I spend one class session going over AI-generated grant proposals, pointing out that tone, terminology, and breakdown are often excellent, especially in the way they mirror the language of various "Calls for Proposals" for funding. I've used very simple prompts and have ChatGPT generate a new proposal each time I teach the course. The most recent iterations have been frighteningly on point, with very few aspects that can be used as teaching points for criticism. As we review two ChatGPT generated proposals in class, I note that the example topics are still far too general.

I include separately for reference two proposals generated by ChatGPT. I highly recommend having the chosen AI interface generate the documents in question anew. The prompts I used (with examples provided as a

handout) were:

- **"Create a 1000-word grant proposal for researching the Japanese tea ceremony"**
- **"Create a 1000-word grant proposal for researching the quality of tea"**

(with the understanding that the "Japanese tea ceremony" as a term may be problematic, but it gives the AI lots to cull from—"chanoyu" doesn't work nearly as well.)

Even without being provided details in the prompt, ChatGPT breaks down the proposal into standard sections for a grant proposal. Note that these are similar to but do not necessarily perfectly dovetail with the Grading Rubric.