

Inquiry 4: Writing a group proposal on an original research idea

Concept: Much of the balance of this OAS course will be devoted to the generation of an original research proposal that will be submitted as Inquiry 4. This assignment takes the place of the scheduled final exam and will occupy much of your time for the next twelve weeks. As is increasingly the case in the intellectual world, you will be spent working in a group (specifically your cohort) to generate an idea, research the relevant literature to define the proposal's significance and originality, and then write and submit for review a proposal in a format consistent with typical guidelines for your discipline. Both a short and a more substantial oral presentation will be made to the class which will be asked to review and critique your cohort's proposal. By the day of the final exam (December 14 at 5 pm) your cohort will turn in a single final version of a proposal that has been vetted by an expert in the field and by your peers.

Be aware that the ability to work together as a team is essential to the success of Inquiry 4. In fact, learning to work in a team, something you will have to do often when you enter the real world, is an actual skill that you can develop through practice. So this is a great place to start putting personality aside and look at your cohort as a finely tuned engine, with various parts with different talents that can be assembled to produce the best research product.

WARNING, WARNING. Plan that for the rest of the semester at least a portion of your weekly cohort meetings will be devoted to Inquiry 4. This is the way you will make sure inquiry deadlines are met—unlike individual inquiries, there are no extensions for Inquiry 4. **If you don't participate actively and enthusiastically in all phases of the inquiry, your TA or UGTA has been told to remove you from your cohort. You will then be on your own to complete all the requirements of the inquiry.** **WARNING, WARNING.**

As different deadlines arise you will receive additional instructions, but for now:

Calendar of events and due dates:

Oct 11 – 27	Identify general area of interest and assign duties to research team members.
Oct 27, 10 am	Deadline to turn in Form I for Inquiry 4. Form I includes proposal topic area and group assignments
Oct 27- Nov22	Generate original research idea, read relevant literature in area of interest, generate literature citations supporting research idea, identify a PhD mentor to approve the research idea.
Nov 14– 17	Group meetings with Dr. Laude or Dr. Scala for final proposal approval and advice
Nov 17	Short presentations (1 minute) to class on research topic
Nov 19 – Dec 3	Formal research presentations (20 minutes) to the class
Nov 21, 7 pm	Deadline to turn in Form II for Inquiry 4 to your cohort leader. Form II includes proposal abstract, Ph.D. approval and list of citations
Nov 22 – Dec 4	Formal research presentations (15 minutes) to the class
Dec 3, 11:59 pm	Deadline to submit Form III for Inquiry 4 with completed proposal
Dec 4 – 6	Proposal criticism period--proposals distributed to peers for review.
Dec 6 at 5:59 am	Proposal criticism deadline--proposals distributed to peers for review.
Dec 15, 5 pm	Deadline to submit Form IV (reflection) for Inquiry 4 with final version of proposal and rebuttal arguments.

Inquiry 4 Form I: Team Formation for Proposal on Original Research Idea

Part 1: Group formation, designation of research area and assignment of duties. (Due in class on October 27.)

General Proposal Topic Area: _____

TA or UGTA leader: _____

Faculty (Ph.D.-level) advisor: _____

Cohort team members:

Research team duties. Each duty described below needs at least one person and can have up to two if there is a strong interest in the area. Make sure the work is distributed evenly and properly based upon individual talents and skills. Be aware that everyone participates in the important areas of intellectual development of the idea, back ground research of the literature and proposal review, but ultimately one person takes responsibility for the work.

Principal Investigator: Makes sure that everyone behaves responsibly in turning in assignments on time-- this is the person who submits assignments to Drs. Laude or Scala and is the person harassed by Drs. Laude or Scala when assignments don't show up. This person also snitches to the TA about people who are not pulling their fair share. Traits include organizational and people skills, the ability to finesse a bad situation and a secret desire to run the world.

Intellect: The brains behind the operation (though no one knows it),--the person responsible for making sure that the original idea is actually original. Although everyone contributes to the intellectual development of the proposal this is the person best able to assess the quality of the idea in terms of significance and originality. You can always tell this kind of person—he or she would talk about school work on a date, that is, if he or she could get a date.

Presenter: In a few weeks someone in the group has to stand up in front of everyone and make a 1 minute presentation of the original idea. This person should be articulate and able explain and defend the proposal even when they have no idea what is going on.

Rebutter: All proposals are reviewed and some one has to be able to read nasty reviews, separate the good from the bad and the ugly, and write a rebuttal. This individual is thick skinned and able to find clever ways to win over the program director in refuting negative reviews while minimizing the work needed to rewrite the original proposal.

Librarian: This is the well-read person responsible for making sure that essential literature citations are identified and that submitted citations are accurate and follow appropriate style. Although this work might appear superficially to be mundane, poorly done literature citation is the leading cause of the scathing vitriol that turns scientific meetings into war zones.

Writer: The person who assemble all written material into a seamless proposal. The ability to write well is obvious but this person also must have an eye for organization and format as well as the ability to assimilate proposed changes into the final product. While everyone must contribute to some of the actual writing of the proposal, this person makes is all seamless.

Inquiry 4 Form II: Proposal Abstract and Citations (due November 21 at 7 pm)

In support of Inquiry 4, during the month of November your cohort will:

- hold group brainstorming sessions to develop the idea for a proposal
- search the literature for relevant references to argue the significance and originality of the idea
- and vet the idea with someone who possesses a Ph.D. in the general subject area.

Form II should be submitted when these three tasks are completed, but not later than November 21nd.

Some more detail on what must be done for Form II.

- Brainstorming sessions to identify an idea. Arrange a hour reading party or some other process that will allow everyone to come together , read the articles, and talk about them. It is during this time that I think you will be able to synthesize the foundation for the original research idea.
- Refine your idea: Working together in and out of cohort meeting times, learn as much as you can about the field in which you will produce your original idea. As the idea is refined it should be framed in a way that fits the proposal parameters (time frame, cost, resources, likelihood of success.)
- Create a list of relevant citations (bibliography). Each member of the group is responsible for finding and then creating a hard copy of at least three peer-reviewed articles from the primary literature that serve as reference material for the proposal. Use the resources taught to you in this class to engage the physical and virtual libraries and museums that retain this information.
- Approval from a PhD who thinks you have a good idea. Arrange a meeting with a PhD in general area in which you are writing your proposal. Describe your idea to that person and get his or her reaction and suggestions. A signature or e-mail approval from the PhD sent to me is a necessary part of the approval process before you write you proposal.
- Creating a list of references. The librarian in the group is responsible for collecting the journal articles and creating a list of references. These will be given to the group organized (hereafter referred to as the PI or Principle Investigator) who will turn in reference lists and copies of the articles on the 21nd.
- Format for submitted materials. Listed below is the format for the information I expect to see from the PI on the 21nd.

Inquiry 4 Form II: Proposal Abstract and References

General information on Proposal.

General Research Area: _____

Cohort UGTA or TA: _____

Cohort PI: _____

Cohort PhD: _____

Approval signature from PhD (or attach an e-mail from PhD): _____

Working title for original proposal:

Abstract of research idea including originality and significance. (Limit to five sentences)

List of references. Provide a minimum of three citations per group member. Use a reference style that is consistent with a leading journal in the field of interest. Include the names of the articles in the list of references.

Librarian name: _____

Journal citation style (give name of journal.) _____

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

Name of group member: _____

Reference 1.

Reference 2.

Reference 3.

OAS Inquiry 4: Writing a proposal on an original research idea—Form III, the Proposal

By this point in Inquiry 4, you will have formed a research cohort, identified a research area, collected 3 x number of cohort members worth of original citations as background, brainstormed an idea, presented it to Scala or Laude, identified a PhD who will approve your proposal idea, and be in the process of completing Form II, which includes an abstract and citations (due Sunday, November 21st at 7 pm to your UGTA.)

Now it is time to write the proposal.

Deadline for Form 3 with Proposal: Friday, December 3rd at 11:59 pm (submitted electronically as a pdf to Dr. Laude's e-mail address.)

Length: 4 page minimum and 5 pages maximum excluding references and figures.

Format: 1-inch margins on all sides, single spaced, Times New Roman 12 point font, right justified.

In writing the proposal, include the following in sequence:

Title: All caps. Avoid a generic title. I want a title that reflects what you are doing. Sometimes titles are the hardest thing you write since you have so few words to grab attention.

Abstract. The abstract should be between 100 and 200 words in length. It should synopsise the proposal. It is not supposed to be a review of the literature but rather provide a very specific summary of what is being proposed. Assume a substantial knowledge of the field in writing the abstract. Make sure questions like “why this is significant?” and “what will be done?” are answered.

Introduction. Provide a brief historical foundation for the proposal with lots of citations.

Originality and Significance. This section is, in essence, the make or break part of a proposal. It is here that you validate the idea.

Objective. A very short summary of what you intend to accomplish in the time frame of the proposal.

Methods. If you will be collecting experimental data, this is where you explain in fairly substantial fashion the blow-by-blow of experimental design for the experiments you will perform. Make sure you reference heavily other folks who have used similar procedures or equipment so that you can refer people to details rather than take up space on them. If you are doing something more theoretical, you can still provide me with an understanding of the foundational theoretical methodology to be used. If you are doing something programmatic, provide an organized frame for execution of the program, referring to examples of best practices on which you will build your effort.

Results. Describe in detail the kind of information you expect to collect and how you plan to process it to demonstrate desired outcomes. You don't need to speculate much here, just let me know what new knowledge is being generated.

Expected outcomes. In this concluding section, let me know how the results you collect will allow you to support your original objective. Make sure the important implications of the results are noted.

Applicant background, resources, time line and budget. Briefly describe what qualifications are represented in the group, what resources you have to perform the experiments, what the time frame for the experiment will be and approximately how much it will cost to do the work. This entire section should take no more than half a page, so be pretty general in answering.

References. Done in the style of a research journal in which you would publish results from execution of the proposed research. These citations do not count in the proposal length.

OAS Inquiry 4: Writing a proposal on an original research idea—Form IV, the Criticism

As your final individual assignment for OAS, each of you must write an approximately 500 word (1 page, single-spaced) review of a research proposal submitted by a rival research team.

Procedure:

1. Between midnight and 5:59 am on December 4th, you will receive, electronically, a copy of one of 16 proposals submitted for consideration. It will arrive as a pdf document. Contact Dr. Laude if you do not receive a proposal to review.
2. In writing the review, use 1-inch margins on all sides, single spaced, Times New Roman 12 point font, right justified. Use the word count option in your word processing program to achieve a number of words between 400 and 600. (Although it won't kill me if you go over.)
3. Submit the proposal review electronically to dalaude@mail.utexas.edu by Monday, December 6th at 6:59 am. The document must be in .pdf format.
4. Completion of this assignment on time is essential for passing the course. I want each of the research groups to have a reasonable amount of feedback from which to generate a final version of the proposal.

Proposal Review Content.

1. Include the proposal title and PI name in the introductory sentence.
2. The first paragraph (about 100 words) should provide a synopsis of the proposal objectives.
3. The balance of the review should provide a critical assessment of the proposal. Possible topics are:
 - the significance of the proposal
 - appropriate reference to prior work
 - the originality of the proposal idea
 - the likelihood of success of the proposal
 - clarity, organization and quality of writing
 - quality of the procedure including experiment design and analysis
 - quality of facilities and personnel, appropriateness of budget and timeline
4. A brief summary paragraph in which you recommend to fund or not fund with a general statement about quality of the proposal.

Some important considerations.

1. Proposal don't have to be negative. If you think it is a great idea, say so, but be able to justify based upon an argument for the significance and originality of the proposal.
2. You don't have to respond to every topic area listed above. Choose to say only what is most important.
3. Need some examples? Often the hardest part of writing something like this is knowing what kind of phrases and structure to use. I will post some old reviews I have written. Don't read for content, read for format and phrasing. Also, there is a lot of attention to typos in some of the reviews I'll send, but often those were for manuscripts which needed that kind of editing--ignore that kind of detail in proposal reviews.
4. Big picture reviews are appropriate. In proposals, you want to know whether this is going to be important work and whether it will actually succeed. Don't' sweat the small stuff unless it is a likely reason for failure.