UNDERGRADUATE RESEARCH PROJECT PROPOSAL GUIDELINES

Important note about writing a proposal: Proposals are informative and persuasive writing because they attempt to educate the reader and to convince that reader to do something (give you money). The goal of the writer is not only to persuade the reader to do what is being requested, but also to make the reader believe that the solution is practical and appropriate. In persuasive proposal writing, the case is built by the demonstration of logic and reason in the approach taken in the solution. The effectiveness of your proposal will depend on your ability to explain the nature, context and scope of your project.

Most proposals will have all of the following sections; although, a rare few may lack section 2. It is recommended but not required that you follow the listed order, however a few proposals flow better with sections in a different order – this is fine, just be sure that there is a logical flow to your writing. It is also recommended that all proposals use headers for each section.

Your proposal should consist of the following:
1. Clear statement of research question – Very clearly state what you will be studying. Be sure that this is understandable to someone who doesn't know much about your field of study. If needed, define terms. To test your explanation – give this to a friend not in your major. If he/she doesn't understand, try again!

2. Project Goal and Objectives - Goals and Objectives are often confused with each other. They both describe things that a person may want to achieve or attain but in relative terms may mean different things. Both are desired outcomes of work done by a person but what sets them apart is the time frame, attributes they're set for and the effect they inflict. Both the terms imply the target that one's efforts is desired to accomplish. (See page 4) Example:
    *   Goal: Our after-school program will help children read better.
    *   Objective: Our after-school remedial education program will assist 50 children in improving their reading scores by one grade level as demonstrated on standardized reading tests administered after participating in the program for six months.

NOTE: #1 and 2 are very important, actually the most important part of your proposal. The rest of your proposal supports these statements. They don't need to be long – one short paragraph should be enough – but it is the most critical. The rest of your proposal will explain why you want to explore this question, how you will do it, and what it means to you.

3. Background/Statement of the Problem/Significance of the Project - Be succinct. Clearly support your statement with documentation and references, and include a review of the literature that supports the need for your research or creative endeavor. A discussion of present understanding and/or state of knowledge concerning the question/problem or a discussion of the context of the scholarly or creative work. This section presents and summarizes the problem you intend to solve and your solution to that problem. What is the question that you want to explore in your research and why is this an interesting and important question? In thinking about the significance, try to take the position of an educated newspaper reader. If she or he were to see an article about your research in the paper, how would you explain the importance of your project? **For most proposals, this section will have references – please see #8 below.

If your project is a portion of a larger project, the background should describe the research in general, on a large scale, but the Project Description should be all about what you are going to do. This section should also include how your project benefits or impacts the project as a whole and what knowledge is gained from your piece of the project.

4. Experimental/Project Design - Design and describe a work plan consistent with your academic discipline. This may include scientific research in the physical or biological sciences, use of population samples, experimental and control groups, or other methods of data gathering and statistical analysis. The work plan may include archival research, translating, ethnographic fieldwork, solitary thinking, or other forms of analysis and synthesis of ideas and concepts in the arts and humanities. This section of the proposal should explain the details of the proposed plan. How will you go about exploring your research question? What will be your methods? If you are not the only person working on the project, who else will be involved?

    Be specific on what you will be doing. The reasoning behind the research opportunity is to make sure that you have a meaningful experience. If the reviewer can't tell what part of a project you will be doing, he/she can't evaluate your experience.

5. Project timeline – Give an overview of when you are going to do specific steps of your project. This does not need to be a day to day list but depending on the length of your project it may give an overview biweekly or monthly. Be sure to include time to review/synthesize your data or to reflect on the experience. You should include time to write the final report/paper.

6. Anticipated results/Final Products and Dissemination. Describe possible forms of the final product, e.g., publishable manuscript, conference paper, invention, software, exhibit, performance, etc. Be specific about how you intend to share your results or project with others. This section may also include an interpretation and explanation of results as related to your question; a discussion on or suggestions for further work that may help address the problem you are trying to solve; an analysis of the expected impact of the scholarly or creative work on the audience; or a discussion on any problems that could hinder your creative endeavor.

7. Student's personal statement – This section is read carefully by the reviewers and does impact their decision. You may wish to include why you want to do this project, what got you interested in it, your career goals, and how this award would further those goals. While it is important, please remember that it shouldn't overpower the rest of the proposal. One-quarter to one-half of the page should be sufficient.

8. **Project References – Use the standard convention of your discipline including the author, title of article, journal title, volume, pages, and date. References are not included in (are in addition to) the 2 page max.

9. Budget - Your list of budget items and the calculations you have done to arrive at a dollar figure for each item should be summarized on the Budget form. You should keep these to remind yourself how the numbers were developed. Budget Narrative - A narrative portion of the budget is used to explain the line items in the budget. Projects that include travel should be specific about benefit/reasons and locations.

The Keys to Effective Writing

Getting Started - Begin by brainstorming topics, collecting information, taking a lot of notes, and asking a lot of questions. Keep your notes and sources organized as you go. This data-gathering process makes the actual writing much easier. When developing your topic, look for patterns and relationships. See what conclusions you can draw. Try discussing your ideas with classmates or your teacher. A new perspective can help shake up your thinking, and keep your momentum going.

Organize Your Writing - Develop an outline to help you stay on track as you write, identifying your main points and what you want to conclude. Keep in mind basic essay and paper structure:

The introduction should give your reader an idea of the essay's intent, including a basic statement of what the essay will discuss.

The body presents the evidence that supports your idea. Use concrete examples whenever and avoid generalities.

The conclusion should summarize and make sense of the evidence you presented in the body.

The Rough Draft - You may find as you write that you end up with a different idea than the one you began with. If your first topic or conclusion doesn't hold water, be open to changing it. If necessary, re-write your outline to get yourself back on track.

TIPS:

Leave enough time to show your draft to others -- use the writing center, if possible. A fresh perspective can help you polish your paper, and catch inconsistencies and mistakes.

Describe a problem that is about the same size as your solution. Don't draw a dark picture of nuclear war, teen suicide and lethal air pollution if you are planning a modest neighborhood arts program for children.

Don't describe the absence of your project as the problem. "We don't have enough beds in our battered women's shelter" is not the problem. The problem is increased levels of domestic violence. More shelter beds is a solution.

Become familiar with the vocabulary of your subject. For example, when writing about fiction, drama, and poetry, critical writers use words such as: syntax, tone, attitude, voice, speaker, and thesis.

Refine and Proofread

When you're done, take a break so you can come back to your writing with fresh eyes. Ask yourself: Is the writing clear? Do the ideas make sense? Are all of my requirements fulfilled? Did I avoid repetition? Have I used proper grammar and spelling? How does it sound read out loud?

Remember the title and first paragraph are going to form a strong impression in the mind of the reviewer.

Facts must lead logically and inevitably to the conclusion and/or the solution presented.

Remember that proposal reviewers may come from a variety of disciplines and may not be familiar with your field of study. Reviewers may also have to compare proposals across disciplines and methodological lines. Keep this in mind when writing. Proposals should be directed toward a general audience (unless otherwise specified) and avoid excessive use of jargon!

Goals vs Objectives vs Tasks

The words Goal and Objective are often confused with each other. They both describe things that a person may want to achieve or attain but in relative terms may mean different things. Both are desired outcomes of work done by a person but what sets them apart is the time frame, attributes they're set for and the effect they inflict. Both the terms imply the target that one's efforts is desired to accomplish.

Goals are generically for an achievement or accomplishment for which certain efforts are put. Goals are the vision of the project

Objectives are specifically for targets within the general goal. Objectives are time related to achieve a certain task. Objectives are measurable activities to achieve goals; the end points envisioned for the proposed project. These objectives might be, for example, development of a specified measurement capability that meets a prescribed accuracy, data rate, instrument packaging characteristics (size, weight, etc.), and other possible requirements. Analogies would be the goal line in a football game, and the mountain peak a climber plans to ascend. Objectives are achieved, or they are not. They are not performed or carried out. They do not yield results or data.

Tasks in a work (or research) plan are steps taken to achieve the stated objectives for the project. They are, for example, a sequence of experiments, analyses, field trials, etc., that together lead to attainment of the project "objectives." In the football game analogy, the tasks are a sequence of plays that culminate in getting the ball over the goal ("objective") line. To the mountain climber, the tasks are a series of actions (hiking up trails, crossing streams, climbing rocks, etc.) that bring the climber to the targeted mountain peak.

	Goal	Objective
Meaning	The purpose toward which an endeavor is directed	Something that one's efforts or actions are intended to attain or accomplish; purpose; target
Time frame	Long term	Short term
Measure	Cannot be measured	Can be measured
Example	I want to achieve success in the field of genetic research and do what no one has ever done	I want to give you the thesis on genetic research within this month
Type	Intangible	Tangible
Action	Generic action	Specific action
Plan	Broad plan	Narrow plan