

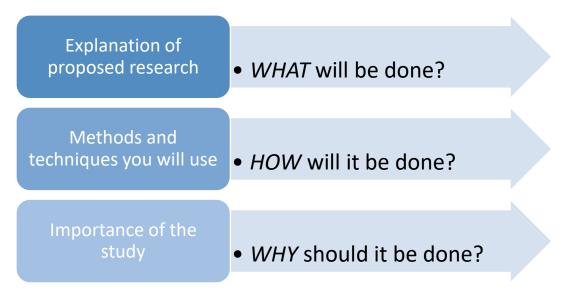


Basics of a research proposal

A research proposal is a concise and coherent summary of your proposed project that explains:

- The central questions you are exploring
- The general area of study within which your research falls
- How your research fits into the bigger picture of what we already know

Questions that a research proposal should answer:



Why should I write a proposal?

For good planning: Thinking through your research plan in a structured way helps ensure your plans are realistic, accurate, and efficient.

To share with others: Once you have your ideas thought through, you can share them with others who can give input based on their unique perspectives and areas of expertise.

To get research funding: A fully articulated proposal is needed to apply for funding.

To get permission to do research: The research licensing, ethics, and community review processes all require a detailed proposal that walks the reader through your research plan – this allows community members and reviewers to understand what you are proposing and whether it will be appropriate for their community or oversight.





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The parts of a research proposal

Below is a summary of each part of a research proposal and its purpose:

1. TITLE: A quick summary of your work

E.g., Plant Biodiversity after Wildland Forest Fires in the Mackenzie Delta, NWT.

2. ABSTRACT: A brief description of your entire proposal – usually written at the end (once you have a completed proposal), it should include your research question, hypothesis, goals, and brief information about each section below.

3. INTRODUCTION: A general overview of the subject area your research falls under, the purpose of the study, and how you came to identify the need for this research. The introduction lays the groundwork for the rest of your proposal by answering key questions, including:

- What is the research question or hypothesis you are testing?
- What are the questions you would like to answer?
- What is the context and how did you arrive at this study?
- Why is it important?
- Based on what is already known in this field, what do you expect to see and hope to show through your results?

4. LITERATURE REVIEW: A deep-dive into what researchers already know about the subject you are interested in—what is interesting in the field that led to your research idea? What other research explores your subject and what does your work add to the conversation? Are there any debates between other researchers about topics in this field, or something we still don't know?

Your literature review should use tons of other sources, particularly academic journal articles. Make sure you cite everything!

(see #8 below for more information on citing sources)







5. METHODS AND MATERIALS: A summary of the methods and materials you plan to use to answer your research question or explore your hypothesis. This section should be detailed enough so a reader can both understand if your methodology is good and, if they so choose, repeat the steps to your methods almost exactly to see if they get the same results. It should be *very detailed*, including:

- Your geographic research area, including maps of any study/sampling areas
- The processes you will use
- Equipment and/or supplies you will need
- The research design you will use
- Who will take part in your study and how they will be recruited
- The measurements or samples you will need and the tools, questionnaires, or data collection methods you will use, including your reasons for choosing them
- The activities required to carry out your study

6. TIMELINE: An overview of the timeline of your project.

An example timeline template:

Task	Details	Completion Date
Write literature review and research proposal		January 2021
Secure Research Licensing	What licenses will we need? ENR, ARI, PWCHC?	April 2021
Prepare tests/experiments	Need to buy a recorder for interviews	May 2021
Start field work/interviews/experiments		June 2021
Complete field work/interviews/ experiments		September 2021
Compile and organize data		October 2021
Interpret data and start writing an article		January 2022

7. BUDGET: A breakdown of the costs of all materials, activities, travel, wages, and other resources required for your study. Phase 2 of Research CA\$H includes a session dedicated to managing research budgets to support the creation of your budget (Session 7: Budget and Grant Administration).





8. CONCLUSIONS AND JUSTIFICATION: A final summary of why your topic is important and how your research will advance knowledge. Why does your research deserve funding? Will your work potentially change practices or policies?

9. LITERATURE CITED: A list of all documents, research, publications, and sources you used to help develop your idea and write the proposal. You must include all the resources that were included in your proposal to ensure that other researcher's work is attributed to them and so readers can look at the other studies you mentioned.

There are several "styles" that can be used to complete this section. For more guidance, check out the links below:

Aurora College Research Help - Citing Sources: <u>https://auroracollege.libguides.com/research/citations</u>

Purdue University Online Writing Lab: <u>https://owl.purdue.edu/owl/research and citation/apa style/apa formatting and style guid</u> <u>e/general format.html</u>

University of Pittsburgh Citation Styles Guide: <u>https://pitt.libguides.com/citationhelp</u>

Further Reading:

University of Southern California - Organizing Your Social Sciences Research Paper: Writing a Research Proposal. <u>https://libguides.usc.edu/writingguide/researchproposal</u>

McGill University - Ten tips for writing your research proposal. McGill University https://www.mcgill.ca/gps/students/progress-tracking/proposals

Medicine Hat College - Writing a Scientific Research Proposal. Medicine Hat College. <u>https://www.mhc.ab.ca/services/academicsupport/~/media/a6c5e5b4dc184e8d8c72d72ec7032a</u> <u>2c.ashx</u>

Gibson, Spencer. How to write a Research Grant? Or How to get a grant rejected? <u>https://www.umanitoba.ca/institutes/manitoba institute cell biology/MICB/Forms/How%20to%</u> <u>20write%20a%20Research%20Proposal.ppt</u>

This document was adapted from: Chaulk-Parrott, Amanda. 2017. *Designing Research and Research Proposal.* [Aurora College Environment and Natural Resources Program Teaching Resource].