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# Academic Writing – Sample Outline

**Below is an example of a research paper outline. Please note that this is only a general guide.**

Your assignments may require a different structure and/or different components than the ones shown here; however, outlining a paper typically follows the same general process. If you have any questions about your written assignments or the expectations set for academic writing in your course(s), refer to your syllabus and **ask your professor!**

## Research Paper Outline

**Research questions** are essential to writing a research paper and will serve as the foundation of your outline. They will also help you build the content of your paper; the sources and analysis discussed in the literature review (the body of the paper) should aim to answer each research question.

*Note that your research questions might change as you begin the process of finding reliable sources.*

### Research Questions

- How, if at all, has women's representation in STEM education changed over time?
- What are the actual and perceived barriers to women pursuing educational opportunities in STEM?
- Could biological sex differences serve as an additional explanation for the disparity?
- What are the recommended interventions to encourage women to pursue educational opportunities in STEM?

### CREATIVE TITLE

GENDER PARADOX? A LOOK AT THE UNDERREPRESENTATION OF WOMEN IN STEM EDUCATION

### ABSTRACT

The abstract, *if required*, should be written LAST. It is a 100 word or less summary of your paper, typically no longer than a paragraph, appearing on its own page. Do not indent the paragraph.

### INTRODUCTION

- Introduce the topic: discuss its relevance and why people should care. Use citations wherever appropriate.
- Introduce the research questions that the author (you) seeks to answer.
- Finish with a transition sentence that guides the reader into the first section.

## LITERATURE REVIEW

### HEADING 1: How, if at all, has women’s representation in STEM education changed over time?

[Introduce Section]

- SUBHEADING 1: Undergraduate & Graduate Student Graduation Rates
  - SUBHEADING 1.1: Bachelor’s Degrees
  - SUBHEADING 1.2: Master’s / Doctoral Degrees
- SUBHEADING 2: Representation in the workforce
- SUBHEADING 3: Socioeconomic and race/ethnicity factors

[Transition Sentence to Next Section]

### HEADING 2: What are the actual and perceived barriers to women pursuing educational opportunities in STEM?

[Introduce Section]

- SUBHEADING 1: Stereotypes and Cognitive Ability
- SUBHEADING 2: Pre-College Determinants and the STEM Pipeline
- SUBHEADING 3: Experience with Culture, Pedagogy, and Lack of Role Models in College

[Transition Sentence to Next Section]

### HEADING 3: Could biological sex differences serve as an additional explanation for the disparity?

[Introduce Section]

- SUBHEADING 1: Sex Differences in Vocational Preferences
- SUBHEADING 2: Gender Equality Paradox

[Transition Sentence to Next Section]

### HEADING 4: What are the recommended interventions to encourage women to pursue educational opportunities in STEM?

[Introduce Section]

- SUBHEADING 1: Early K-12 Outreach: Recruitment
- SUBHEADING 2: Mentorship: Retention
- SUBHEADING 3: Pedagogy, Faculty Representation, and Campus Climate: Retention

[Transition Sentence to Conclusion]

## CONCLUSION

- Cohesively wrap up your paper. Summarize the main points and reiterate the topic relevance.
- Do not include any new information not previously presented in the literature review.
- Maximum 1-2 paragraphs.

**Your paper outline can be as detailed as you would like, but start small and build up. Once you create the foundation of your paper as shown here, you can begin to include bullet points for the sources you would like to reference or analyze in each section. As you conduct your research and learn more about your topic, or as you brainstorm new ideas, your outline may change: *and that is okay!***

**For additional assistance with academic writing, visit the [CU Writing Center](#).**