# **CUR Final Manuscript Requirements**

## GENERAL REQUIREMENTS

Articles submitted to CUR must meet the following criteria:

- The manuscript must present research completed by one or more undergraduate students.
- Research must be the author's own work and may not have been previously published.

Research manuscripts submitted to CUR should contain the following sections:

# TITLE PAGE

Every manuscript should begin with a title page that includes the following information:

Title of the manuscript Author names

Department

University name

### ABSTRACT

Every article submitted to CUR must have an abstract that consists of a single paragraph of 250 words. In the abstract, the author must summarize why the research was conducted, how it was conducted, and the major results and conclusions. In essence, it should contain an overview of the hypothesis, methods, results, conclusions and implications of the research. References are typically not cited in the abstract, since the reader expects a more thorough discussion in the body of the article.

### INTRODUCTION

The author should use the introduction to summarize current literature, present the problem his or her research addresses, why this problem is significant, and how it applies to the larger field of research. If the manuscript is novel or creative in some way, it should be clearly stated. The author should address relevant studies by other researchers; however, a full history of the topic is not needed. Finally, the author must clearly state the hypothesis and briefly summarize the methods used to investigate that hypothesis. The introduction should contain all the background information a reader needs to understand the rest of the author's paper. This means that all important concepts should be defined. Remember: CUR caters to an audience of professionals and undergraduates from a variety of fields. For example, an author need not define an "electron"; however, a "Cooper paired electron" does require a definition.

### MATERIALS AND METHODS

The author should thoroughly describe the materials and methods used to investigate the problem and should briefly describe why these methods were used. There should be enough information provided to replicate the study. This section should contain no results, conclusions, or interpretations. Information should be grouped under appropriate subheadings (e.g. Techniques, Materials, Statistical tests, etc.). Authors should be sure to include the following information, when applicable:

Experimental handling and care of any subjects (animals, plants, humans), including ethical guidelines followed by the author(s) in their use.

Description of field sites (if applicable) including physical and biological features and exact location. Sample preparation techniques and the origins of samples and other materials (including human subjects). Note that if methods have been described elsewhere it is permissible to reference the original source in lieu of describing the methodology again. For example, "Samples were prepared using the same process described by Newton (2000)." Details surrounding any statistical testing used, as well as the threshold used for statistical significance.

### RESULTS

Papers submitted to CUR must have separate results and discussion sections. In the results, the author should thoroughly detail the outcomes of the experiments, tests, and/or theories developed in the research. The results should be supplemented by figures and/or tables, which should be briefly explained. An effective results section will present the key results without interpreting their meaning. All interpretation and discussion of results should be saved for the discussion section.

#### DISCUSSION

In this section, the author should restate the problem he or she was attempting to address and summarize how the results have addressed it. The author should discuss the significance of all the results and interpret their meaning in the context of previous studies done by other researchers in the field. Potential sources of error should be discussed. Finally, the author should tie his or her conclusions into the "big picture" by suggesting the implications and applications this research might have. The author should discuss how this research affects the field, what it adds to existing research, and what future experiments could be carried out. Remember: This section synthesizes the whole study and should be treated as the most important part of the manuscript.

### REFERENCES

All Research and Review articles must contain in-text citations accompanied by a list of references in the format appropriate to the discipline. Please list all authors for each source in the References section. Footnotes are not permitted. References may include: research articles published in scientific journals, scholarly books (i.e., not textbooks), and personal communications with scientists working in the field, or unpublished data (only data, no conclusions). Web sources must be scholarly in nature, such as official reports (e.g., NASA's Report on the Effects of Long-Duration Space Flight on the Human Respiratory System). While all of the above sources are acceptable, the majority of references used in a paper should be peer-reviewed articles.

### APPENDICES

Though not prohibited, authors are discouraged from including appendices or supplementary figures in their manuscripts.

### ACKNOWLEDGEMENTS

An acknowledgement section is not required; however, most papers include a paragraph of acknowledgements. This can include thanking individuals for assistance with experiments or interpretation of data, as well as thanking funding sources.

### **FIGURES AND TABLES**

Figures and tables are important components of scientific manuscripts. Each figure or table should clarify information from the study and must be able to stand alone from the rest of the article and still be understood by potential readers. To ensure this, authors must follow these guidelines:

Submit figures as high-resolution JPEG images.

Submit all captions together in a document separate from the rest of the manuscript.

All figures and tables should be ordered sequentially (1,2,3...). They should be referenced within the text in

this format: "The results show [...] (Figure 2)."

Figures and tables should be simple, clearly formatted, and indicate error using standard deviation or

comparable information.

Captions should include succinct title and description for each illustration, providing sufficient information for

readers to understand each figure without being verbose.

Note: The author must have permission to use all figures submitted with the manuscript.

Review manuscripts submitted to CUR should follow similar guidelines as Research articles, with a few

exceptions.