# Instructions for completing the PVAMU REH/REU Final Paper.

# **Significance:**

This paper is the culmination of your efforts during your REH/REU experience. Please be aware the quality of this paper will forever reflect the quality of your accomplishments during this program. Be sure to represent yourself, your mentor, your school, and the REH/REU program to the best of your ability.

As you are writing, please keep in mind that your abstract, or even the entire paper, may be used for publication. (If so, both you and mentor will be contacted for confirmation that the contents are appropriate and accurate for public dissemination.)

#### **Guidelines:**

Your paper should be 3-5 pages in length if you are a REH student and 5-7 pages if you are a REU student, excluding the cover page and reference page. Papers should be written in a professional style suitable for publication in a professional journal.

## **Paper Submission:**

Papers are due **July 27, 2017**. Please submit a signed hard copy of the paper and an electronic copy to srep@pvamu.edu.

To avoid unnecessary errors it is strongly recommended that you use the "spell-check" and "grammar-check" functions of your word processing software.

#### PAPER STRUCTURE

#### 1. Cover Page

The cover page must include your name, school, program (REH or REU), as well as your mentor's name and department. The cover page must be signed by both you and your mentor so include lines for signatures. (See example cover page for more details).

#### 2. Abstract

Include a one-paragraph (4–6 sentences, < 250 words) abstract that describes your project's purpose and results. The abstract should address the importance of your project, the project goals, a brief explanation of method and results. Your abstract should be written last, which will allow you to come up with a clear concise description. Do not include references in the abstract.

# Keywords

Immediately after the abstract, provide a maximum of 5 relevant keywords for the research.

#### 3. Introduction

In this section, state the central problem/questions/objectives of the research and provide an adequate background. Discuss why your research is important or interesting. In providing background, include a review of relevant literature. What prior research set the precedent for your project? Always cite your sources.

#### 4. Methodology/Approach

Describe details of the methods used or approach taken in addressing the research problem/questions. Provide sufficient detail that would allow someone else to reproduce the work.

#### 5. Results

In this section, describe your findings/results. Provide tables, graphs and pictures where appropriate. Results should be clear and concise. Be careful not to interpret your results here (save that for the Discussion section).

#### 6. Discussion

Provide an analysis of your results. Discuss the significance of the results. What do the results of your work mean? Are there questions left unanswered? What is your "take home message" for the reader? Importantly, here is where you also compare/contrast your findings to those in the scientific literature.

*Note*: You may combine the Results and Discussion sections if appropriate for the work and discipline.

#### 7. Conclusions

In this section, briefly summarize and reiterate your research and major findings. Discuss directions for future work (if applicable).

*Note:* The Conclusions section may stand alone or be a subsection of a Discussion or Results and Discussion section.

#### 8. References

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). It is strongly recommended that you use references to scientific literature (and not personal communications or Websites).

# Supplementary data

#### Appendices

Please include any raw data as an Appendix. Survey instruments should also be included as an Appendix. If there is more than one appendix, they should be identified as A, B, etc.

#### **Abbreviations**

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

# **Acknowledgements**

If applicable, organize acknowledgements in a separate section at the end of the article before the references. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the paper, etc.).

#### FORMATTING GUIDELINES

#### Cover page format

- Title 14 pt Times bold, align center
- Other cover page text 12 pt Times, align center
- Signature lines for the student and mentor should be included at the bottom.
- 1 inch margins

#### Title

• Title - 14 pt Times bold, align center

- Author name, mentor name, and affiliations 12 pt Times bold, align center
- Titles should be concise and informative. Avoid abbreviations and formulas where possible.

## **Sections, Headings and Text**

- Section Headings 12 pt Times bold, align left
- Subheadings 12 pt Times, underline, align left
- Body text 12 pt Times

## Paragraph and page format

- 1 inch margins
- 1.5 line spacing
- 0.5 inch paragraph indent
- Page numbers in upper right hand corner of page (cover page should not be numbered).

#### Tables and figures

- Each figure and table must have a caption that provides a textual description of the figure/table. Cite the source of the figure/table if applicable.
- Figures and tables should be numbered sequentially in the order they appear in the paper. (e.g. Figure 1, Figure 2, Table 1, Table 2, etc.)
- Figures 12 pt Times, caption at the bottom of the figure
- Tables 12 pt Times, caption at the top of the table
- When referring to a figure in the paper, spell out 'figure,' as in: Figure 1 shows the changes in concentration over time. (same for tables)

#### **References and in text Citations**

- APA style can be used for in text citations and the reference page. (refer to presentation on APA)
- A journal in the respective field of the research can also be used for in text citations and the reference page. (refer to your mentor for guidance)

# **Example citations and references from the Journal of Membrane Science.**

#### Reference style

*Text:* Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.

Example: '.... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result ....'

List: Number the references (numbers in square brackets) in the list in the order in which they appear in the text.

# Examples:

Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, J. Sci. Commun. 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, The Elements of Style, fourth ed., Longman, New York, 2000. Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), Introduction to the Electronic Age, E-Publishing Inc., New York, 2009, pp. 281 304.

Parts of this document adapted from:

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