Presenting a Technical Paper

Edwin F. Hilinski

NSF-REU Site: Sunshine Institute for the Interaction of Light with Matter
Department of Chemistry and Biochemistry
Florida State University, Tallahassee, FL 32306-4390

E-mail: efhilinski@fsu.edu
http://www.chem.fsu.edu/hilinski

Adapted from Dale Carnegie Training, 1996 Dale Carnegie & Associates

Acknowledgment - We thank the National Science Foundation Research Experiences for Undergraduates (NSF-REU) Sites program. This material is based upon work supported by the National Science Foundation under Grant No. CHE-2150301.
1. Tell them what you’re going to tell them.

2. Tell them.

3. Tell them what you’ve told them.
1. Do not read your presentation!!

2. Know your audience.

3. Keep eye contact with the audience.

4. Make sure that your visuals are readable.

5. Try not to jiggle the pointer, jingle coins, click retractable pens, do not remove then replace then remove then replace… the cap of a dry erase marker, etc.

6. The shorter the talk, the more practice you need.
Organize Your Presentation

1. What is the problem?

2. What do you hypothesize?

3. How did you test your hypothesis (experiment)?

4. What did you observe?

5. What did you conclude?

6. Cite all references to the literature.
   If you are not sure, cite a reference; do not plagiarize.
Introduction

Methods

Results

And

Discussion

Conclusions
Title Title Title Title Title
Title Title Title Title Title

REU Student Name, In-Lab Mentor 1, In-Lab Mentor 2, and Professor Name*

NSF-REU Site: Sunshine Institute for the Interaction of Light with Matter
Department of Chemistry and Biochemistry, Florida State University
Tallahassee, Florida, 32306-4390

Image(s)

Acknowledgment(s) - We thank the National Science Foundation Research Experiences for Undergraduates (NSF-REU) Sites program. This material is based upon work supported by the National Science Foundation under Grant No. CHE-2150301. [Add additional acknowledgments as needed/desired.]
Introduction

1. The subject—problem and hypothesis

2. Background and justification

3. Objectives of the study
Methods

1. Materials, equipment, and the location of the experiment

2. Methods of sampling

3. Methods of analysis

4. Statistical evaluations
Results and Discussion

1. Synopsis of results

2. Presentation of data
   a. Figures
   b. Tables
   c. Graphs

3. Discussion of significance
Conclusions

1. Summarize your results

2. Put them in context – why they are important

3. Optional – future work to be done and why
Types of Illustrations

1. Tables
2. Graphs – line, bar, pie, 3D
3. Photos
1. Tables should be clear
   a. Put like items in columns
   b. Round off numbers; significant figures; align decimals

2. Figures
   a. Limit the number of curves or bars on graph
   b. $x$ is the independent variable; $y$ is dependent
   c. Avoid wasted space, but do not overcrowd
   d. Label axes carefully
Use of Color in Slides

1. Background – subdued or neutral colors

2. Highlighting points – bright or contrasting colors

3. Check colors on projection screen

4. Coordinate colors for presentation

5. Implement the KISS principle
Posters

1. Brief and clearly organized

2. Simple with an obvious central point
   a. Short text / paragraphs (<20 lines)

3. Easy to read from 1 to 2 meters away

4. Attractive and aesthetically pleasing
   a. Mix visual imagery with text
   b. Use color appropriately

[More details about posters will be given in separate documents: PosterPresentations_Arial_240607a.pptx ; PosterPresentations_Arial_240607a.pdf ; Poster_Template_240607a.pptx .]