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Design for Scientific Communication

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DASC 3240 LO3 | Basics in figure and data presentation – Exercise

2024/25 SPRING SEMESTER

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Exercise

- 1. Slide (PowerPoint presentation)
- 2. Text (Word file)
- 3. Image
- 4. Video

- An example of a "bad" slide.
- What are the bad points? How can you improve the slide?

List of Al-tools

- Chat GPT
- Copilot
- Gemini
- Deepseek









• These are great tools to help you learn programming!

There are other AI tools for more specific purposes, such as a-fold (for protein structure prediction), DeepL (language translation) etc.

- An example of a "bad" slide.
- What are the bad points? How can you improve the slide?

The number of microbial cells on the insect body surface

The right figure shows the number of microbial cells on the insect body surface. Figure 1a indicates the relationship between insect species and the number of microbial cell counts. Figure 1b indicates the relationship between the microbial cell counts and the insect body weight. <u>Vespa</u> <u>analis insularis</u> harbors the largest number of microbes, and there is a positive correlation between the microbial cell counts and insect body weight.

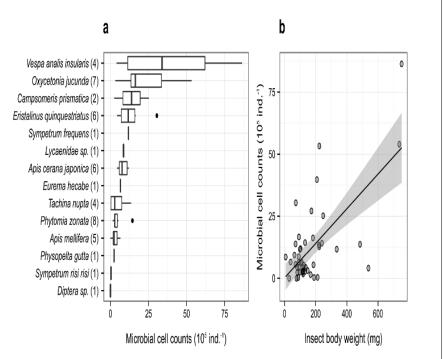


Figure 1 | Microbial cell counts and their relationship with insect body weight. (a) Microbial cell counts of collected insect species. Numbers in parentheses indicate how many individuals were analyzed for each insect species. (b) The relationship between insect body weight (i.e., fresh weight) and microbial cell counts. The solid line indicates the linear regression between the two variables. The gray region is the 95% confidence interval of the regression.

Ushio et al. (2015) Scientific Reports

- An example in "Basic Design Rule (3rd edition)"
- How can you improve the word document? What make the document "not good"?
- You can download the word file from https://github.com/ong8181/DASC32 40/tree/main/DASC3240_Items



Design of Presentation

AAA BBBB (Faculty of Science)

Presentation is the act of introducing via speech and various additional means (for example with sharing computer screen or projecting some screen information) new information to an audience. Usually presentations are used in seminars, courses and various other organizational scheduled meetings.

Overview

Although some think of presentations in a business meeting context, there are often occasions when that is not the case. For example, a non-profit organization presents the need for a capital fund-raising campaign to benefit the victims of a recent tragedy: a school district superintendent presents a program to parents about the introduction of foreign-language instruction in the elementary schools an artist demonstrates decorative painting techniques to a group of interior designers: a horticulturist shows garden club members or homeowners how they might use native plants in the suburban landscape: a police officer addresses a neighborhood association about initiating a safety program.

Presentations can also be categorized as vocational and avocational. In addition, they are expository or persuasive. And they can be impromptu, extemporaneous, written, or memorized. When looking at presentations in the broadest terms, it's more important to focus on their purpose.



Audience

There are far more types of audiences than there are types of presentations because. audiences are made up. of people and people. come in innumerable. flavors. Individuals could be invited to speak to groups all across the country. What the individual says and how

they may say it depends on the makeup of those groups. They may ask you the individual to address a room full of factory operations

- Can you identify the source of these images?
- Can you use them in your presentation or report? Explain why or why not.
- If you can use it,
 please explain
 what is the
 appropriate way to
 use the image.



Chinese White Dolphin



Probable disease resistance protein At 1g58602

- How about this video?
- This is a supplement of Wiley et al. (2023)
 https://royalsocietypublis hing.org/doi/10.1098/rs os.221376
- The paper is "open access" (anyone can see and share it), but how about the supplement?
- Please explain why or why not you can use the video freely.



Deployment of biologging tags on free swimming large whales using uncrewed aerial systems

Next lecture: 12 Feb (WED) from 10:30-11:50

LO4 | R and Rstudio – I Overview and installation

- Start using RStudio
- Basics of R and RStudio
- Please bring your own laptop!
- There is NO assignment, but you will do some hands-on.